Pattern Energy Group Inc. Form 10-K March 01, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the Fiscal Year Ended December 31, 2018.

-OR-

..TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission File Number 001-36087

PATTERN ENERGY GROUP INC.

(Exact name of Registrant as specified in its charter)

Delaware 90-0893251 (State or other jurisdiction of (I.R.S. Employer

incorporation or organization) Identification No.) 1088 Sansome Street, San Francisco, CA 94111

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (415) 283-4000

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class

Name of Each Exchange on Which Registered

Class A Common Stock, par value \$0.01 per share

Nasdaq Global Select Market
Toronto Stock Exchange

Securities registered pursuant to Section 12 (g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ý No "

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes "No \circ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No "Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ý No "

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer

Non-accelerated filer "Smaller reporting company"

Emerging growth company "

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. "

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes "No \circ

The aggregate market value of the voting stock and non-voting stock held by non-affiliates of the registrant based upon the last trading price of the registrant's Class A common stock as reported on the Nasdaq Global Select Market on June 30, 2018 was approximately \$1.5 billion. This excludes 16,829,692 shares of Class A common stock held by directors, officers, Pattern Renewables LP and certain of its affiliates, and Public Sector Pension Investment Board. Exclusion of shares does not reflect a determination that persons are affiliates for any other purpose.

The registrant's Class A common stock is listed on the Nasdaq Global Select Market and on the Toronto Stock Exchange under the symbol "PEGI".

On February 22, 2019, the registrant had 98,077,874 shares of Class A common stock, \$0.01 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement relating to its 2019 annual meeting of stockholders (the "2019 Proxy Statement") are incorporated by reference into Part III of this Form 10-K where indicated. The 2019 Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

TABLE OF CONTENTS

PART I	
Business.	<u>7</u>
. <u>Risk Factors.</u>	<u>23</u>
. <u>Unresolved Staff Comments.</u>	<u>49</u>
<u>Properties.</u>	<u>49</u>
<u>Legal Proceedings.</u>	<u>49</u>
Mine Safety Disclosures.	<u>50</u>
<u>PART II</u>	
· · · · · · · · · · · · · · · · · · ·	<u>51</u>
Selected Financial Data.	<u>53</u>
Management's Discussion and Analysis of Financial Condition and Results of Operations.	 53 54 77 78 78 78
. Quantitative and Qualitative Disclosures about Market Risk.	<u>77</u>
Financial Statements and Supplementary Data.	<u>78</u>
Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.	<u>78</u>
. Controls and Procedures.	<u>78</u>
. Other Information.	<u>80</u>
	<u>81</u>
<u>*</u>	<u>81</u>
· · · ·	<u>81</u>
<u>. </u>	<u>81</u>
Principal Accounting Fees and Services.	<u>81</u>
DADE NA	
	0.2
	<u>82</u>
Form 10-K Summary	<u>S-82</u>
	Business. Risk Factors. Unresolved Staff Comments. Properties. Legal Proceedings. Mine Safety Disclosures. PART II Market for Registrant's Common Equity and Related Stockholder Matters. Selected Financial Data. Management's Discussion and Analysis of Financial Condition and Results of Operations. Quantitative and Qualitative Disclosures about Market Risk. Financial Statements and Supplementary Data. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure. Controls and Procedures.

CAUTIONARY NOTICE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K ("Form 10-K") contains statements that may constitute forward-looking statements. You can identify these statements by forward-looking words such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "should," "will," "would," or similar words. You should read statements that contain these words carefully because they discuss our current plans, strategies, prospects, and expectations concerning our business, operating results, financial condition, and other similar matters. While we believe that these forward-looking statements are reasonable as and when made, there may be events in the future that we are not able to predict accurately or control, and there can be no assurance that future developments affecting our business will be those that we anticipate. Our forward-looking statements involve significant risks and uncertainties (some of which are beyond our control) and assumptions that could cause actual results to differ materially from our historical experience and our present expectations or projections. Important factors that could cause our actual results to differ from those in the forward-looking statements, include but are not limited to, those summarized below and further described in Part I, Item 1A "Risk Factors:"

our electricity generation, our projections thereof and factors affecting production, including wind, solar and other conditions, other weather conditions, availability and curtailment;

our ability to manage exposure to project development risks;

our ability to complete acquisitions and dispositions of power projects;

our ability to complete construction of construction projects and transition them into financially successful operating projects;

fluctuations in supply, demand, prices and other conditions for electricity, other commodities and renewable energy credits (RECs);

changes in law, including applicable tax laws;

public response to and changes in the local, state, provincial and federal regulatory framework affecting renewable energy projects, including those related to taxation, the U.S. federal production tax credit (PTC), investment tax credit (ITC) and potential reductions in Renewable Portfolio Standards (RPS) requirements;

the ability of our counterparties to satisfy their financial commitments or business obligations;

the availability of financing, including tax equity financing, for our power projects;

an increase in interest rates and the discontinuation of LIBOR;

our substantial short-term and long-term indebtedness, including additional debt in the future;

competition from other power project developers;

development constraints, including the availability of interconnection and transmission;

potential environmental liabilities and the cost and conditions of compliance with applicable environmental laws and regulations;

our ability to operate our business efficiently, manage capital expenditures and costs effectively and generate cash flow;

our ability to retain and attract executive officers and key employees;

our ability to keep pace with and take advantage of new technologies;

the effects of litigation, including administrative and other proceedings or investigations, relating to power projects in development, under construction and those in operation;

conditions in energy markets as well as financial markets generally, which will be affected by interest rates, foreign currency exchange rate fluctuations and general economic conditions;

the effectiveness of our currency risk management program;

the effective life and cost of maintenance of our wind turbines, solar panels and other equipment;

the increased costs of, and tariffs on, spare parts;

scarcity of necessary equipment;

negative public or community response to power projects;

the value of collateral in the event of liquidation; and

other factors discussed under "Risk Factors."

Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statements after the date they are made, whether as a result of new information, future events or otherwise.

Statistical Data

The statistical data used throughout this Form 10-K, other than data relating specifically solely to us, are based upon independent industry publications, government publications, reports by market research firms or other published independent sources. We did not commission any of these publications or reports. These publications generally state that they have obtained information from sources believed to be reliable, but do not guarantee the accuracy or completeness of such information. While we believe that each of these studies and publications is reliable, we have not independently verified such data and make no representation as to the accuracy of such information. Currency Information

In this Form 10-K, reference to "C\$" and "Canadian dollars" are to the lawful currency of Canada, references to "JPY" and "Japanese Yen" are to the lawful currency of Japan and references to "\$", "US\$" and "U.S. dollars" are to the lawful currency of the United States. All dollar amounts herein are in U.S. dollars, unless otherwise noted.

MEANING OF CERTAIN REFERENCES

Unless the context provides otherwise, references herein to "we," "our," "us," "our company" and "Pattern" refer to Pattern Energy Group Inc., a Delaware corporation, together with its consolidated subsidiaries. In addition, unless the context requires otherwise, any reference in this Form 10-K to:

- "Amazon Wind" refers to Fowler Ridge IV Wind Farm LLC, a wind project located in Benton County, Indiana;
- "Armow" refers to SP Armow Wind Ontario LP, a wind project located in Kincardine, Ontario, Canada;
- "Broadview" collectively refers to Broadview Finco Pledgor LLC (Broadview Project), consisting of Broadview Energy KW, LLC and Broadview Energy JN, LLC, a wind project located in Curry County, New Mexico, and Western Interconnect;
- "El Arrayán" refers to Parque Eólico El Arrayán SpA, a wind farm located in Ovalle, Chile (we disposed of our interests in El Arrayán on August 20, 2018);
- "ERCOT" refers to the Electric Reliability Council of Texas;
- "FERC" refers to the U.S. Federal Energy Regulatory Commission;
- **•** FIT" refers to feed-in-tariff regime;
- "FPA" refers to the Federal Power Act;
- "Futtsu" refers to GK Green Power Futtsu, a solar project located in Chiba Prefecture, Japan;
- "GPG" refers to Green Power Generation GK which consists primarily of 100% ownership in Ohorayama, Otsuki and Kanagi, and a consolidated controlling interest in Futtsu;
- "GPI" refers to Green Power Investment Corporation;
- "Grand" refers to Grand Renewable Wind LP, a wind project located in Haldimand County, Ontario, Canada;
- "Gulf Wind" refers to Pattern Gulf Wind LLC, a wind project located in Kenedy County, Texas;
- "Hatchet Ridge" refers to Hatchet Ridge Wind, LLC, a wind project located in Shasta County, California;
- "Identified ROFO Projects" refers to projects that we have identified as development projects, owned by either of the Pattern Development Companies and subject to our Project Purchase Rights. See Identified ROFO Projects list in Item 1. Business;
- "IPPs" refers to independent power producers;
- "ISOs" refers to independent system organizations, which are organizations that administer wholesale electricity markets;
- "ITCs" refers to investment tax credits;

- "K2" refers to K2 Wind Ontario Limited Partnership, a wind project located in Ashfield-Colborne-Wawanosh, Ontario, Canada (we disposed of our interests in K2 on December 31, 2018);
- "Kanagi" refers to GK Green Power Kanagi, a solar wind project located in Shimane Prefecture, Japan;
- "kWh" refers to kilowatt hour;
- "Logan's Gap" refers to Logan's Gap Wind LLC, a wind project located Comanche County, Texas;
- "Lost Creek" refers to Lost Creek Wind, LLC, a wind project located in DeKalb County, Missouri;
- "Meikle" refers to Meikle Wind Energy L.P., a wind project located in Peace Region, British Columbia, Canada;
- "MSM" refers to Mont Sainte-Marguerite Wind Farm Limited Partnership, a wind project located in Chaudiére-Appalaches, Quebec, Canada;
- "Multilateral Management Services Agreement" (MSA) refers to the amended and restated multilateral services agreement between us and each of the Pattern Development Companies;
- "MW" refers to megawatts;
- "MWh" refers to megawatt hours;
- "Non-Competition Agreement" refers to the second amended and restated non-competition agreement between us and each of the Pattern Development Companies in which we and each of the Pattern Development Companies have agreed to various arrangements with respect to how we may and may not compete with each other;
- "Ocotillo" refers to Ocotillo Express LLC, a wind project located in Imperial County, California;
- "Ohorayama" refers to GK Green Power Otsuki, a wind project located in Kochi Prefecture, Japan;
- "Otsuki" refers to GK Otsuki Wind Power (formerly known as Otsuki Wind Power Corporation), a wind project located in Kochi Prefecture, Japan;
- "Panhandle 1" refers to Pattern Panhandle Wind LLC, a wind project located in Carson County, Texas;
- "Panhandle 2" refers to Pattern Panhandle Wind 2 LLC, a wind project located in Carson County, Texas;
- "Pattern Canada Operations Holdings ULC" consists primarily of 100% ownership of St. Joseph, a consolidated controlling interest in Meikle and MSM, and a noncontrolling interest in Armow, Grand, K2 (which we disposed of on December 31, 2018) and South Kent, each of which are accounted for as unconsolidated investments;
- "Pattern Development" refers to Pattern Energy Group 2 LP, a Delaware limited partnership, and, where the context so requires, its subsidiaries. We hold an approximate 29% ownership interest in Pattern Development;
- "Pattern Development Companies" refers collectively to Pattern Energy Group LP and Pattern Development and their respective subsidiaries;
- "Pattern Development Companies Purchase Rights" refer collectively to our right to acquire Pattern Energy Group LP or substantially all of its assets, as contemplated by the Amended and Restated Purchase Rights Agreement between α and Pattern Energy Group LP (Pattern Energy Group LP Purchase Right) and to our right to acquire Pattern Development or substantially all of its assets, as contemplated by the Amended and Restated Purchase Rights Agreement between us and Pattern Development (Pattern Development Purchase Right);
- "Pattern Energy Group LP" refers to Pattern Energy Group LP, a Delaware limited partnership, and, where the context so requires, its subsidiaries;
- "Pattern US Operations Holdings LLC" consists primarily of 100% ownership interest of Gulf Wind, Hatchet Ridge, Lost Creek, Ocotillo, Santa Isabel and Spring Valley, and a consolidated controlling interest in Amazon Wind, Broadview, Logan's Gap, Panhandle 1, Panhandle 2, Post Rock, Stillwater and Western Interconnect;
- "Post Rock" refers to Post Rock Wind Power Project, LLC, a wind project located in Ellsworth and Lincoln counties, Kansas;
- "PPAs" refer to power purchase agreements;

- "Project Purchase Rights" refers collectively to our right of first offer with respect to power projects that Pattern Energy Group LP decides to sell, as contemplated by the Amended and Restated Purchase Rights Agreement between us and Pattern Energy Group LP, and our right of first offer with respect to power projects that Pattern Development decides to sell, as contemplated by the Amended and Restated Purchase Rights Agreement between us and Pattern Development (in each case including any Identified ROFO Projects);
- "PSAs" or "power sale agreements" refer to PPAs and/or hedging arrangements, as applicable;
- "PSP Investments" refers to the Public Sector Pension Investment Board;
- "Purchase Rights" refers collectively to the Project Purchase Rights, and the Pattern Development Companies Purchase Rights, as contemplated by the Amended and Restated Purchase Rights Agreement between us and Pattern Energy Group LP and the Amended and Restated Purchase Rights Agreement between us and Pattern Development;
- "RECs" refers to renewable energy credits;
- "Riverstone" refers to Riverstone Holdings LLC;
- "ROFO" refers to right of first offer;
- "RPS" refers to Renewable Portfolio Standards;
- "Santa Isabel" refers to Pattern Santa Isabel LLC, a wind project located in Santa Isabel, Puerto Rico;
- "Sarbanes-Oxley Act" refers to the Sarbanes-Oxley Act of 2002;
- "South Kent" refers to South Kent Wind LP, a wind project located in Chatham-Kent, Ontario, Canada;
- "Spring Valley" refers to Spring Valley Wind LLC, a wind project located in White Pine County, Nevada;
- "St. Joseph" refers to St. Joseph Windfarm Inc., a wind project located in Montcalm, Manitoba, Canada;
- "Stillwater" refers to Stillwater Wind, LLC, a wind project located in Stillwater County, Montana;
- "Tsugaru" refers to Green Power Tsugaru GK, a wind project located in Aomori Prefecture, Japan;
- "Tsugaru Holdings" refers to Green Power Tsugaru Holdings GK, which consists primarily of 100% ownership of Tsugaru; and
- "Western Interconnect" refers to Western Interconnect LLC, a transmission line located in Curry County, New Mexico.

PART I

Item 1. Business.

Overview

We are a vertically integrated renewable energy company with a mission to transform the world to renewable energy. Our business consists of (i) an operating business segment which is comprised of a portfolio of high-quality renewable energy power projects located in many attractive markets that produces long-term stable cash flows and (ii) ownership interests in an upstream development platform aligned with our operating business which provides us access to a pipeline of projects and potential for higher returns through project development.

Through our operating business segment, we hold ownership interests in 24 renewable energy projects with an operating capacity that totals approximately 4 gigawatts (GW) which are located in the United States, Canada and Japan. Our projects use proven, best-in-class technology and have contracted to sell all or a majority of their output pursuant to long-term, fixed-price PSAs. Approximately 92% of the electricity expected to be generated by our projects in which we have an owned interest will be sold under PSAs that have a weighted average remaining contract life of approximately 13 years as of December 31, 2018.

We own an approximate 29% interest in Pattern Development which engages in the development of projects around the world primarily in the United States, Canada, Mexico and Japan. Pattern Development seeks to promote environmental stewardship and works closely with communities to create renewable energy projects. Our arrangements with Pattern Development include rights of first offer, shared services, and overlap of executive officers. We have sought to align our interests to provide us access to a pipeline of development projects that we have an ability to acquire to grow our business, or (through our approximate 29% interest) to share in returns realized by Pattern Development when it sells projects to third parties. Pattern Development has more than a 10 GW pipeline of development projects.

We were incorporated in the state of Delaware in October 2012 and conducted an initial public offering in October 2013.

Our Core Values and Financial Objectives

We intend to maximize long-term value for our stockholders in an environmentally responsible manner and with respect for the communities in which we operate. Our business is built around three core values of creative energy and spirit, pride of ownership, and a team-first attitude, which guide us in:

creating a safe and high-integrity work environment for our employees;

applying rigorous analysis to all aspects of our business in a timely, disciplined and functionally integrated manner to understand patterns in wind and solar regimes, technology developments, market trends and regulatory, financial and legal constraints; and

working proactively with our stakeholders to address environmental and community concerns, which we believe is a socially responsible approach that also benefits our business by reducing operating risks at our projects.

Our financial objectives, which we believe will maximize long-term value for our stockholders, are to:

produce stable and sustainable cash available for distribution;

selectively grow our project portfolio and our dividend per Class A share of common stock; and maintain a strong balance sheet and flexible capital structure.

We accomplish our core values and financial objectives through delivering top-tier operating fleet performance, maintaining growth through acquisitions and development from Pattern Development Companies, continuing improvements in business strategy, and maintaining a prudent capital structure and financial flexibility, as discussed further below in "-Our Business Strategy."

Structure of Our Company

Our Operating Business Segment

Overview

We hold interests in 24 renewable energy projects and operate, on behalf of ourselves and others, an aggregate renewable energy portfolio of approximately 4 GW in the United States, Canada and Japan. Each of such projects use best-in-class equipment from top-tier suppliers and has contracted to sell all or a majority of its output pursuant to long-term, fixed-price PSAs. As a portfolio, as of December 31, 2018, our assets are characterized by:

an approximate 13 year weighted average remaining contract life under our PSAs;

92% of electricity to be generated by our projects will be sold under PSAs;

an 'A-' weighted average off-taker credit rating; and

4.9-year average age of fleet, primarily using GE and Siemens turbines.

We seek to own high quality projects that have gone through a rigorous review prior to construction. As a result, and in order to meet our own investment targets and our lenders' financing criteria, our projects generally have the following characteristics:

•multiple years of on-site wind and solar data tied to one or more long-term wind and solar energy reference sources; •long-term contractually secured real estate property and easement rights;

right to firm interconnection to the electricity grid;

all requisite construction and operating permits and regulatory approvals;

fixed-price turbine supply and construction contracts with guaranteed completion dates; an operations and maintenance service program based on on-site personnel and central operations management. See "-Management, Operations, Maintenance and Administration of Projects in which We Have an Owned Interest" below; and

safety, environmental and community programs that support the project.

The following table provides an overview of our renewable energy projects in which we have an owned interest:

The following table	s provides a			s energy proj	ects III v	willcli we lia	ive all owned fill		
Operating Project ⁽¹⁾	Location	Commencement of Commercial Operations	Composite			Contracted Volume ⁽⁴⁾	Counterparty	Counterparty Credit Rating ⁽⁵⁾	Conti Expii
Pattern US Operati	ons Holding		111 171					Tumb	
Broadview	New Mexico	2017	324	272	PPA	100%	Southern California Edison	BBB/A3	2037
Gulf Wind (7)	Texas	2009	283	283	Hedge	58%	Morgan Stanley	BBB+/A3	2019
Ocotillo	California	2012	265	265	PPA	100%	San Diego Gas & Electric	BBB+/A2	2033
Panhandle 1	Texas	2014	218	172	Hedge	80%	Citigroup Energy Inc.	BBB+/Baa1	2027
Post Rock (7)	Kansas	2012	201	120	PPA	100%	Westar Energy, Inc.	Baa1/A-	2032
Logan's Gap (7)	Texas	2015	200	164	PPA	58%	Wal-Mart Stores, Inc.	AA/Aa2	2025
Logan's Gap (7)					Hedge	17%	Merrill Lynch Commodities, Inc.	A-/A3	2028
Panhandle 2	Texas	2014	182	75	Hedge	80%	Morgan Stanley	BBB+/A3	2027
Spring Valley	Nevada	2012	152	152	PPA	100%	NV Energy	A/Baa2	2032
Amazon Wind (7)	Indiana	2015	150	116	PPA	100%	Amazon.com, Inc.	AA-/A3	2028
Lost Creek (7)	Missouri	2010	150	150	PPA	100%	Associated Electric Cooperative, Inc.	AA/A1	2030
Tsugaru	Japan	2020	122	122	PPA	100%	Tohoku Electric Power Company	Unrated	2040
Hatchet Ridge	California	2010	101	101	PPA	100%	Pacific Gas & Electric Puerto Rico	D/Caa3	2025
Santa Isabel	Puerto Rico	2012	101	101	PPA	100%	Electric Power Authority	NR/Ca	2032
Stillwater	Montana	2018	80	35	PPA	100%	Northwestern Shikoku	BBB/A3	2043
Ohorayama	Japan	2018	33	33	PPA	100%	Electric Power Company	A-	2038
Futtsu Solar	Japan	2016	29	29	PPA	100%	TEPCO Energy Partner Shikoku	BB+/Ba2	2036
Otsuki	Japan	2006	12	12	PPA	100%	Electric Power Company	A-	2026
Kanagi Solar	Japan	2016	10	10	PPA	100%	Chugoku Electric Power Company	A3	2036

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Pattern Canada Operations Holdings ULC

South Kent	Ontario	2014	270	135	PPA	100%	Independent Electricity System Operator ⁽⁶⁾	NA/Aa3	2034
Armow	Ontario	2015	180	90	PPA	100%	Independent Electricity System Operator ⁽⁶⁾	NA/Aa3	2035
Meikle	British Columbia	2017	179	91	PPA	100%	BC Hydro	NA/Aaa	2042
Grand	Ontario	2014	149	67	PPA	100%	Independent Electricity System Operator ⁽⁶⁾	NA/Aa3	2034
Mont Sainte-Marguerite	Quebec	2018	143	73	PPA	100%	Hydro-Quebec	NA/Aa2	2043
St. Joseph	Manitoba	2011	138 3,672	138 2,806	PPA	100%	Manitoba Hydro	A+/Aa2	2039
			3,012	۷,000					

⁽¹⁾ Represent wind projects unless otherwise noted.

Rated capacity represents the maximum electricity generating capacity of a project in MW. As a result of weather and other conditions, a project will not operate at its rated capacity at all times and the amount of electricity generated may be less than its rated capacity. The amount of electricity generated may vary based on a variety of factors.

- (3) Owned capacity represents the maximum, or rated, electricity generating capacity of the project in MW multiplied by our percentage ownership interest in the distributable cash flow of the project.
- (4) Represents the approximate percentage of a project's total estimated average annual MWh of electricity generation contracted under power purchase agreements or hedge arrangements.
- Reflects the counterparty's or counterparty guarantor's corporate credit ratings issued by either Standard and Poor's (S&P) or Moody's, or both S&P and Moody's, as of December 31, 2018.
- (6) Independent Electricity System Operator (IESO) acts as the settlement agent under the respective PPA.
- (7) Projects that are maintained through self-performance of maintenance and service activities.

Management, Operations, Maintenance and Administration of Operating Projects in which We Have an Owned Interest

For each of our projects in the United States and Canada, we provide management, operations and administrative services. This includes management from our 24/7 operations center located in Houston, Texas, and on-site personnel at all facility sites. For our projects in Japan, management, operations and administrative services are provided by an affiliate of GPI, an entity owned by Pattern Development.

Our projects are maintained through:

service arrangements with reputable external third-parties;

our self-performance of maintenance and service activities; or

a combination of both of the above.

At certain projects, as noted above, where we self-perform maintenance and service activities, we maintain long-term turbine manufacturer service arrangements pursuant to which the turbine manufacturer continues to provide routine and corrective maintenance service, but we are responsible for a portion of the maintenance and repairs, including on major component parts. Over time, we expect to increase our operational responsibility, including self-performing maintenance and service work with our own technicians instead of utilizing service providers, which we believe will continue to help us reduce our costs. As service arrangements expire at the facilities where we utilize external third-parties, we intend to determine on a case-by-case basis the most appropriate approach of either entering into new service arrangements with the same or a different external third-party or transitioning to self-performance of maintenance and service activities.

Our Interest in Pattern Development

Overview

As of December 31, 2018, we own an approximate 29% interest in Pattern Development, a leading developer of renewable energy projects focusing on wind, solar, storage, and transmission with core markets in the U.S., Canada, Japan and Mexico. As discussed below, we have sought to align Pattern Development with our interests to provide us access to a pipeline of projects we have an opportunity to acquire and the benefits of potential higher returns in the upstream business of project development.

Pattern Development's Project Development Process

Pattern Development has a development pipeline of more than 10 GW of projects. Pattern Development's project development business involves the execution of a process which involves a combination of working with financing parties to obtain access to capital, managing capital obtained in a disciplined manner, and applying development experience and expertise to develop a renewable energy opportunity to create value. Pattern Development believes a focus on executing complex projects provides it a competitive advantage.

Patten Development has established and seeks to maintain relationships with financial institutions to help provide sources of capital.

Key elements of Pattern Development's efforts to manage capital obtained in a disciplined manner include:

Selecting good opportunities in which to invest;

Minimizing the capital at risk during the early development stages;

•

De-risking projects through long-term offtake contracts and other arrangements so that, during the construction phase, projects have the potential to be sold (if needed) for good development returns; and

Minimizing the duration of the relatively higher capital outlays that are required once a project has achieved an advanced stage.

Pattern Development has experience and expertise in each of the following areas which it applies as part of its process: origination, negotiation, political and community engagement, permitting, scientific and strategic analysis capabilities, and risk management. Pattern Development also has established and seeks to maintain relationships with key contractors and offtake counterparties.

Alignment between Us and Pattern Development

We have sought to align Pattern Development's interests and our interests, including through each of the following arrangements:

Our investment in Pattern Development. We have the right, but not the obligation, to make capital commitments of up to \$300 million to Pattern Development as a part of an approximately \$1 billion of capital commitments which Pattern Development has secured from long-term focused investors. Through February 28, 2019, we have invested a total of \$183 million into Pattern Development, representing an approximate 29% ownership interest.

However, as a part of our arrangements with Pattern Development, while we have the right to participate in all future capital calls by Pattern Development, we are not obligated to participate, and while our interest in Pattern Development would be diluted on a proportional basis if we chose not to participate in a capital call, other negative consequences (such as application of a punitive discount to our investment) would not apply.

Project Purchase Rights. Pursuant to contractual arrangements we have with Pattern Development, we have (among other things) a right of first offer with respect to power projects that Pattern Development decides to sell. See also "-Identified ROFO Projects" below.

In the event Pattern Development does not accept the proposal we make under our rights of first offer, Pattern Development is (with limited exceptions) not permitted to sell such project to a third-party unless the price is at least 110% of the offer price we made, and in the event Pattern Development is unable to enter into an agreement to sell such project to a third-party at such clearing price, Pattern Development is obligated to sell such project to us at 96% of our original offer price.

Our Executive Officers Oversee the Business Operations of Pattern Development. Under the shared service arrangements discussed further below, our executive officers provide executive management services to Pattern Development. Such executive officers, who are employed and compensated by us, devote such of their time that is prudent to carry out those executive responsibilities.

Shared Services Arrangements. Under the MSA, we have shared services arrangements with each of Pattern Development and Pattern Energy Group LP. Such arrangements are intended to allow each of us, Pattern Development, and Pattern Energy Group LP to make their respective personnel available to others in the group to provide certain shared services. Under these arrangements, Pattern Development makes available its personnel to assist us in managing, operating, maintaining, and administering our projects in Japan.

Most of the employees engaged in project development are currently employed by Pattern Energy Group LP; however, under the MSA, each of Pattern Development and us have the right to require such employees to become their or our employees, respectively, who could then continue to provide shared services. Furthermore, even if Pattern Development exercised such right to cause the employees of Pattern Energy Group LP to become its employees, under the MSA, we have the right to cause such employees at Pattern Development to become our employees. We seek to manage conflicts of interest which arise through these arrangements. Material transactions between us and Pattern Development are subject to our corporate governance guidelines which require prior approval of any such material transaction by the conflicts committee, which is comprised solely of independent members of our board of directors. The conflicts committee retains independent advisors to assist it in consideration of such transactions which may include a financial advisor and outside counsel. Those of our executive officers who have economic interests in Pattern Development do not participate in the negotiation of such transactions.

Identified ROFO Projects

Below is a summary of both the Identified ROFO Projects that we may acquire from Pattern Development in connection with our Project Purchase Rights, as well as projects we may acquire from Pattern Energy Group LP pursuant to similar rights we have with Pattern Energy Group LP. See also "- Other Key Relationships - Pattern Energy Group LP."

						Capac	ity (MW)		
							Pattern		
Identified	Status	Location	Construction	Commercial	Contract	Rated	Development		
ROFO Projects	Status	Location	Start (1)	Operations (2)	Type	(3)	Companies		
							Owned (4)		
Pattern Energy Group	p LP								
Belle River	Operational	Ontario	2016	2017	PPA	100	43		
North Kent	Operational	Ontario	2017	2018	PPA	100	35		
Henvey Inlet	In construction	Ontario	2017	2019	PPA	300	150		
Pattern Development									
Crazy Mountain	Late stage	Montana	2019	2019	PPA	80	68		
Crazy Wiountain	development	Williana	2019	2017	пл	80	00		
Grady	In construction	New	2018	2019	PPA	220	188		
Grady	in construction	Mexico	2010						
Sumita	Late stage	Japan	2020	2022	PPA	100	55		
Sumita	development	Japan	2020	2022	1171	100	33		
Ishikari	Late stage	Japan	2020	2022	PPA	112	112		
	development	Jupun	.puii 2020		1111	112	112		
Corona Wind	Late stage	New	2020	2021	PPA	400	340		
Project(s)	development	Mexico	2020	2021	1111				
						1,412	991		

⁽¹⁾ Represents year of actual or anticipated commencement of construction.

⁽²⁾ Represents year of actual or anticipated commencement of commercial operations.

Rated capacity represents the maximum electricity generating capacity of a project in MW. As a result of weather

⁽³⁾ and other conditions, a project will not operate at its rated capacity at all times and the amount of electricity generated may be less than its rated capacity. The amount of electricity generated may vary based on a variety of factors.

Pattern Development Companies-Owned capacity represents the maximum, or rated, electricity generating capacity

⁽⁴⁾ of the project in MW multiplied by Pattern Energy Group LP's or Pattern Development's percentage ownership interest in the distributable cash flow of the project.

The map below provides a depiction of our operating projects and Identified ROFO Projects geographically: Our Business Strategy

To achieve our financial objectives while adhering to our core values, we intend to execute the following business strategies:

Deliver Top-Tier Operating Fleet Performance

We intend to efficiently and safely operate our projects to meet projected revenue and cash available for distribution. We expect to maximize the long-term value of our projects by focusing on value-oriented project availability (by ensuring our projects are operational when the wind is strong and PSA prices are at their highest) and by regularly scheduled and preventative maintenance. We believe that good operating performance begins with a long-term maintenance program for our equipment. We also seek to improve performance and lower operating costs by working closely with our equipment vendors and considering contracting with third parties for maintenance, when appropriate. We believe it is important to employ our own personnel in aspects of our business that we deem critical to the value of our projects. We have achieved a historical operating performance track record of more than 97% turbine availability. Maintain Growth Through Acquisitions and Development

Our strategy for growth is focused on our core markets of the U.S., Canada and Japan. We intend to grow primarily through the acquisition of operational and construction-ready power projects from Pattern Development and three Identified ROFO Projects held by Pattern Energy Group LP. While we intend to prioritize high-quality assets developed by Pattern Development for acquisition, from time-to-time we will consider acquisitions from third parties if they meet our return thresholds and complement our existing portfolio. We believe, however, our ability to have insight into the fundamentals of projects developed by Pattern Development, together with our alignment due to our ownership interest in Pattern Development, would generally make their projects more attractive and less risky to pursue. We expect that projects we may acquire in the future will represent a logical extension of our existing business, and that incremental assumptions of risk in what we pursue will require commensurate expectations of higher returns. As a result, our near-term growth strategy will remain focused on largely contracted cash flows with creditworthy counterparties and operating or in-construction projects.

We expect that our ownership interest in, and aligned interests with, Pattern Development will provide us with the opportunity to acquire projects that Pattern Development develops. However, through our ownership interest in Pattern Development, we can also achieve growth from Pattern Development's sale of assets to third parties, particularly where our available liquidity is committed to other

acquisitions or investments or where projects are developed outside of our core markets. We believe our ownership interest in Pattern Development provides us greater flexibility to achieve returns while continuing to support Pattern Development in the execution of its business plan.

From time to time, we may also consider the disposal of a project, particularly if we believe we can utilize funds realized from such a disposal in a more productive manner or generate a higher return on investment.

Continuous Improvements

As part of our continuous business improvement strategy, we look to create an efficient and scalable corporate organization capable of growth.

Efficiency. We seek to improve our margins through the expansion of our self-perform maintenance initiative as service agreements expire at projects, applying technological advances which emerge to deliver incremental efficiencies for turbines or projects such as the retrofit of hardware onto turbines (for example, dinotails), and upgrading software to more efficiently manage high-speed flow through, each at a cost that delivers positive returns over the length of the project.

Scale. We also intend to improve our existing assets and business processes to reduce the marginal cost of overhead. We can achieve this through areas such as system enhancements and increased automation. We have implemented new systems as a result of this review which we expect will deliver incremental efficiencies and margin expansion from overhead savings and improved workflow. We intend to continue to manage overhead costs though additional back office optimization.

Maintain a Prudent Capital Structure and Financial Flexibility

We intend to maintain a conservative approach to our capital structure to protect our ability to meet our financial obligations, pay our regular dividends and to fund investments for future growth. Power projects by their nature require significant capital investment, and as a result, we seek to protect our business through careful management of our capital structure.

The foundation of our capital structure is built on project finance arrangements intended to ensure risk segmentation across our large project portfolio, and our practice has been to structure our project finance arrangements comprised of a mix of debt, tax equity and equity to conform to investment grade-like credit standards. Specifically, we seek to structure our project finance arrangements to:

match assets with liabilities based on a project's off-take tenor and currency denomination;

fix or hedge project debt on a long-term basis;

amortize our third-party project finance capital within the tenor of the off-take arrangement; and apply conservative debt service coverage or tax equity structuring standards.

Our project capital structure is supplemented with a corporate capital layer that primarily relies on equity capital. Our corporate indebtedness is modest, and intended to ensure broad capital access. In addition, our strategic partnership with PSP Investments is intended to expand capital access and improve flexibility in managing capital requirements. See "- Other Key Relationships - PSP Investments" below.

We seek to ensure financial flexibility and stability through our corporate revolving credit facility, maturity staging, minimization of interest rate exposure, and maintenance of our credit ratings. We intend to use our available liquidity strategically, with a priority placed on our available liquidity for committed project acquisitions or investment commitments. Our foreign currency denominated project dividends are further managed through a short-to-long term foreign exchange program. We believe this approach, together with a strategic consideration of project-level financial restructuring and recapitalization opportunities, will contribute to our ability to maintain and, over time, increase our cash available for distribution.

Work Closely with Our Stakeholders

We believe that close working relationships with our various stakeholders, including suppliers, PSA counterparties, regulators, the local communities where we are located, environmental organizations, as well as with each of the Pattern Development Companies and other developers, allow us to better support our existing projects and will help us access future renewable energy project opportunities.

Industry

Wind and solar energy are the two fastest growing sources of electricity generation in North America and globally over the past decade, and projections by the International Energy Agency indicate renewable energy will continue to grow at a faster rate than fossil fuels over the next two decades. In 2017, global installed wind capacity grew by nearly 11%, bringing the global total to 540 GW. In 2018, approximately 107 GW of solar photovoltaic (PV) capacity was installed worldwide, a 7.5% increase compared to 2017.

The 12th annual report by Lazard on the levelized cost of energy for electricity generating technologies shows a continued decline in the cost of utility-scale wind and solar energy, with unsubsidized costs at or below the marginal costs of conventional generation under certain circumstances. Growth in the industry is largely attributable to the increasing cost competitiveness of renewable energy relative to other power generation technologies and public support for renewable energy driven by energy security and environmental concerns. Falling technology costs and strong public support for renewable energy contributes to the trend of increasing demand from corporate purchasers and state renewable energy programs. Given increased demand, falling costs, and the inherent stability of the cost of renewable energy sources, we believe that our markets present substantial growth opportunities. We require a relatively small share of a large market to meet our growth objectives, and we believe we can achieve growth through the acquisition of operational and construction-ready projects from the Pattern Development Companies and other third parties.

Government Incentives and Tax Credits

Renewable energy sources in the United States have benefited from various federal and state governmental incentives, such as PTCs and ITCs. Under the Consolidated Appropriations Act, federal PTCs and ITCs for wind energy were extended with a five-year phase down for wind projects commencing construction after December 31, 2014 and before December 31, 2019. Notwithstanding the benefits of the tax incentives, the continued reduction in levelized cost of energy provides an environment in which renewables are expected to be highly competitive relative to conventional generation resources. We expect to become less impacted by and less dependent on these forms of government support.

Our Markets

The United States of America

The United States remains a strong growth market for renewable energy and is the second largest growth market for solar PV in the world, according to the International Energy Agency. The U.S. Energy Information Administration (EIA) reports generation from wind and solar power plants grew to 9% of total electricity generation in 2018, up from 8% in 2017. The EIA further reports electricity generation supplied by natural gas increased an estimated 3% in 2018, while coal-fired generation declined by 3%. In 2019, the EIA expects approximately 24 GW of new capacity additions and approximately 8 GW of capacity retirements in the electric power sector, with utility-scale capacity additions consisting primarily of wind (46%), natural gas (34%) and solar photovoltaics (18%), and the remaining primarily other renewables and battery storage capacity.

The falling costs of wind and solar technology have contributed to accelerating demand from corporate purchasers. Bloomberg New Energy Finance finds onshore wind to have the lowest levelized cost of electricity range in the U.S. with PV solar not far behind. In 2018, more than 75 corporate renewable energy deals secured more than 6 GW of capacity. Nearly half of Fortune 500 companies and 63% of Fortune 100 companies have at least one climate or clean energy target, and at least 22 Fortune 500 companies have committed to meet 100% of their electricity demand with renewable energy purchases. As part of a global initiative, 160 companies have made a commitment to go '100% renewable.'

State RPSs continue to drive demand for utility-scale renewable energy. Roughly a 50% increase in renewable energy generation is needed by 2030 to meet state RPS demand, averaging approximately 5 GW of additions per year. More than half of all RPS states have raised their overall RPS targets or carve-outs since initial RPS adoption. In 2018, California, Connecticut, Massachusetts, and New Jersey increased their RPS targets, while New York established an offshore wind procurement target and Massachusetts created a clean peak standard that can help incentivize energy storage deployments.

Japan

The Japanese market is one of the world's largest electricity markets, with the country ranking fourth in the world for the most clean energy transactions in 2017 and fifth in the world for new renewable capacity installed the same year. Out of a total 254 GW capacity installed at the end of 2017, generating 1,077,421 GWh, onshore wind and utility PV solar accounted for 16% of installed capacity and only 7% of energy generation, representing a large opportunity for deployment of wind and solar. The Japanese government has placed a greater emphasis on the development of renewable resources following the nuclear meltdown at the Fukushima Daiichi plant in 2011.

The Japanese government set a target in 2015 to have 22% to 24% of its generation come from renewable energy by 2030. In 2018, the Japanese government released its Fifth Strategic Energy Plan that unites the 2030 energy targets and a 2050 energy scenario aimed at decarbonization. The plan designates renewable energy as a core foundation of the energy generation mix by 2050. The FIT program established in 2012 that offered fixed-term, fixed-price contracts for up to 20 years to renewable power projects remains in place. While the predetermined fixed-price for large solar projects has been replaced with a reverse auction system, the tariff price for onshore wind power remains predetermined at JPY20 per kWh for this FY2019 but will reduce annually by JPY1 per kWh until FY2020 (ending March 2021), after which it is expected to also be replaced with a reverse auction system.

In November 2018, the Japanese government passed a new law allowing offshore wind projects to be developed in the open sea outside of port areas. The precise rules and regulations are expected to be finalized by mid-2019. Like solar, the tariff price will be determined through a reverse auction mechanism. Previously awarded offshore projects in port areas will continue to be eligible for the fixed rate of JPY36 per kWh. As such, there remains a strong incentive for continued investment in the Japanese renewables market, particularly for onshore projects and now additionally with offshore projects due to the passage of the new open sea offshore wind law.

Canada and Other

Canadian clean energy policy arises mostly at the provincial level. Ontario remains Canada's leading market for wind energy with 5,076 MW of installed wind energy generating capacity as of December 2018, accounting for nearly 40% of the country's total installed capacity. We own 292 MW of installed wind capacity in Ontario and 594 MW in Canada. We are the largest operator of installed wind capacity in the country with 1,529 MW in operational contracts. Growth opportunities exist through provincial renewable energy targets, including Alberta's new Renewable Electricity Program that is expected to drive development of at least 4 GW of new wind energy capacity by 2030, and Saskatchewan aims to have wind energy meet 30% of its electricity generating capacity by 2030, adding approximately 2 GW of new wind capacity.

While we currently believe we are unlikely to seek to acquire projects in Mexico pursuant to our Project Purchase Rights, Pattern Development continues to develop renewable energy projects in Mexico. In the event of third-party sales, we may realize benefits due to our ownership interest in Pattern Development.

Environmental, Social and Governance

We are committed to protecting our workforce and the public, to respecting the communities and cultures where we develop and operate projects, and to minimizing our environmental impacts. We have three value statements to emphasize these commitments and each one has an underlying management system - the Safety Management System, the Community Management System, and the Environmental Management System - that provides a programmatic foundation to meeting these commitments. Our sustainability website is located at

www.patternenergy.com/invest/sustainability and details more of our environmental, social and governance values and achievements.

Other Key Relationships

Pattern Energy Group LP

Pattern Energy Group LP is a legacy entity that was involved in the original formation of our company. It was also the sponsor entity at the time of our initial public offering and, until 2018, owned an equity interest in our company. We have Project Purchase Rights with Pattern Energy Group LP that are similar to our Project Purchase Rights with Pattern Development, and there are three Pattern Energy Group LP projects that are Identified ROFO Projects. See "Identified ROFO Projects" above. In addition, together with us and Pattern Development, Pattern Energy Group LP is a party to the MSA. See "- Our Interest in Pattern Development - Alignment of Interest between Us and Pattern Development - Shared Services Arrangements" above. Pattern Energy Group LP has notified us of its intention to wind down operations in an orderly manner after their disposal of the Identified ROFO Projects. While at the beginning of 2018, Pattern Energy Group LP owned approximately 7.5% of our outstanding Class A common stock, Pattern Energy Group LP disposed of such interest in 2018.

PSP Investments

In June 2017, we entered into a strategic joint venture agreement with PSP Investments. The joint venture agreement provides that PSP Investments has the right to co-invest alongside us, up to an aggregate amount of approximately \$500 million, in energy projects we may acquire from the Pattern Development Companies, cooperate with us to complete third-party acquisitions (including possibly arranging for or providing bridge loans and construction financing), and we may add a person that has been designated by PSP Investments to our board of directors. This relationship provides us the ability to increase our portfolio with limited capital investment. In 2018, together with PSP Investments, we acquired each of Mont Sainte-Marguerite (MSM) and Stillwater from Pattern Energy Group LP and Pattern Development, respectively. PSP Investments is also an indirect investor in Pattern Development. PSP Investments does not hold voting rights in Pattern Development. Additionally, as of February 22, 2019, PSP Investments holds approximately 9.5% of our outstanding Class A common stock.

Competitive Strengths

We believe we compete with other industry participants by having a high quality portfolio of projects which are positioned to generate stable long-term cash flows with access to low-cost project-level debt and strong stakeholder relationships. Further, we believe our investment in Pattern Development provides us with a source of attractive investment returns, as well as access to a pipeline of acquisition opportunities that because of our Project Purchase Rights are generally not otherwise available to the broader market, unless the project is not attractive to us. Our business benefits from high quality assets that are broadly diversified across markets, regulatory regimes and counterparties, making it less dependent on performance of single assets or areas. Our operating platform and associated management team provide us with a world class operations platform with experience in how to efficiently run and continuously optimize our operating business. This experience and knowledge in turn is used to facilitate enhanced pricing and improved costing on new assets that are being developed by Pattern Development, thereby creating a continuous cycle of knowledge transfer.

Our management team is highly experienced in renewables development with a good reputation in the industry that has helped to produce many successes in deal execution, financing and development and construction management. We compete with other wind and solar power, infrastructure funds and renewable energy companies, as well as conventional power companies, to acquire profitable construction-ready and operating projects. In addition, competitive conditions may be substantially affected by various forms of energy legislation and regulation considered from time to time by federal, state, provincial and local legislatures and administrative agencies.

Customers

We sell our electricity and RECs primarily to local utilities under long-term, fixed-price PPAs or, in limited instances, local liquid ISO markets. For the year ended December 31, 2018, San Diego Gas & Electric and Southern California Edison Company were our only significant customers representing 12% and 12%, respectively, of our total revenue. Suppliers

There are a limited number of turbine equipment suppliers, including General Electric, Vestas and Siemens-Gamesa; however, we believe that current manufacturing quality and competitive dynamics are strong and that parts and supply capacity is adequate. Our equipment supply strategy is largely based on maintaining strong relationships with leading equipment suppliers to secure our supply needs.

Other important suppliers include global and regional engineering, procurement (EPC) and construction contractors with whom we contract to perform civil engineering, electrical work and other infrastructure construction for our projects.

While we do self-perform some turbine service and maintenance activities, a significant amount of our service work is currently performed by the original equipment manufacturers, primarily Siemens-Gamesa and General Electric, as well as other qualified independent service providers. All our service providers are generally well recognized in the renewable service business. While we expect over time to increase self-perform activities, we do expect to continue to utilize both original equipment manufacturers and qualified independent service companies for a substantial amount of our service and maintenance needs. See "- Our Operating Projects - Management, Operations, Maintenance and Administration of Our Operating Projects" above.

Regulatory Matters

Our operations are subject to regulation by various federal and state government agencies, including, but not limited to, the following:

U.S. Federal Energy Regulatory Commission (FERC)

Our current projects in operation in the United States are operating as Exempt Wholesale Generators (EWGs) as defined under the Public Utility Holding Company Act of 2005, as amended, (PUHCA) and therefore are exempt from certain regulation under PUHCA. Certain of our operating projects in the United States are, however, public utilities under the Federal Power Act subject to rate regulation by FERC. Future projects in the United States will also likely be subject to such rate regulation once they are placed into service. Our projects in the United States that are subject to FERC rate regulation are required to obtain acceptance of their rate schedules for wholesale sales of energy (i.e., not retail sales to consumers), capacity and ancillary services, including their ability to charge "market-based rates." Independent System Operators (ISOs)

Most of our North American projects are located in regions in which the wholesale electric markets are administered by ISOs and Regional Transmission Organizations (RTOs).

North American Electric Reliability Corporation

All of our current operating projects located in North America are also subject to the reliability standards of the North American Electric Reliability Corporation (NERC). If we fail to comply with the mandatory reliability standards, we could be subject to sanctions, including substantial monetary penalties.

Regulatory Matters - Canada

All of our current operating projects in Canada are subject to exclusive provincial regulatory authority with respect to the generation and production of electricity, which varies across provincial jurisdictions. In Canada, activities related to owning and operating wind projects and participating in wholesale and retail energy markets are mostly regulated at the provincial level. In Ontario, for example, electricity generation facilities must be licensed by the Ontario Energy Board and may also be required to complete registrations and maintain market participant status with the IESO, in which case they must agree to be bound by and comply with the provisions of the market rules for the Ontario electricity market as well as the mandatory reliability standards of the NERC.

Regulatory Matters - Japan

All of our current operating projects in Japan are governed by the Ministry of Economy, Trade and Industry (METI). METI has administrative jurisdiction and is the authority that grants licenses to transmission and distribution operators, administers the registration of retailers, and the filings of power generators. The Electricity and Gas Market Surveillance Commission was established by the METI to conduct monitoring of the electricity market and enforces strict regulations to ensure neutrality of the electricity market. The Agency for Natural Resources and Energy, a part of the METI, is responsible for Japan's policies regarding energy and natural resources.

Environmental Regulation

Our operations are required to comply with various environmental regulations in each of the jurisdictions in which we operate. These existing and future laws and regulations may impact existing and new projects, require us to obtain and maintain permits and approvals, comply with all environmental laws and regulations applicable within each jurisdiction and implement environmental programs and procedures to monitor and control risks associated with the construction, operation and decommissioning of regulated or permitted energy assets, all of which involve a significant investment of time and resources. Existing initiatives and rules, some of which could potentially have a material effect (either positive or negative) on us, are as follows:

Avian/Bat Regulations and Wind Turbine Siting Guidelines

We are subject to numerous environmental regulations and guidelines related to threatened and endangered species and their habitats, as well as avian and bat species, for the ongoing operations of our facilities. Environmental laws in the U.S., including the Endangered Species Act, the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act as well as similar environmental laws in Canada (such as the federal Species at Risk Act and the Migratory Birds Convention Act and the Ontario Endangered Species Act, 2007), among others, provide for the protection of migratory birds, eagles and bats and endangered species of birds and bats and their habitats. In addition to regulations, voluntary wind turbine siting guidelines established by the U.S. Fish and Wildlife Service set forth siting, monitoring and coordination protocols that are designed to support wind development in the U.S. while also protecting both birds and bats and their habitats.

Regulation of Greenhouse Gas (GHG) Emissions

The U.S. Congress and certain states and regions, as well as the Government of Canada and its provinces, have taken and continue to take certain actions, such as finalizing regulation or setting targets and goals, regarding the reduction of GHG emissions and the increase of renewable energy generation.

Environmental Matters— Domestic

We are required to obtain a range of environmental permits and other approvals to build and operate our projects, including, but not limited to, those described below from U.S. federal, state and local governmental authorities. In addition to being subject to these regulatory requirements, we could experience and have experienced significant opposition from third parties when we initially apply for permits or when there is an appeal proceeding after permits are issued. The delay or denial of a permit or the imposition of conditions that are costly or difficult to comply with can impair or even prevent the development of a project or can increase the cost so substantially that the project is no longer attractive to us.

Federal Clean Water Act

Frequently, our U.S. projects are located near wetlands, and we are required to obtain permits under the Clean Water Act for the discharge of dredged or fill material into waters of the United States, including wetlands and streams. The Clean Water Act also requires that we mitigate any loss of wetland functions and values that accompanies our activities, obtain permits under the Clean Water Act for water discharges, such as storm water runoff associated with construction activities, and to follow a variety of best management practices to ensure that water quality is protected and impacts are minimized.

Federal Bureau of Land Management Permits

As some of our U.S. projects are located on lands administered by the Bureau of Land Management, we are required to obtain rights-of-way from the Bureau of Land Management. The Bureau of Land Management encourages the development of wind power within acceptable areas, consistent with Environmental Policy Act of 2005 and the Bureau of Land Management's energy and mineral policy.

National Environmental Policy Act

Our U.S. projects may also be subject to environmental review under the U.S. National Environmental Policy Act (NEPA) which requires federal agencies to evaluate the environmental impact of all "major federal actions" significantly affecting the quality of the human environment. The granting of a land lease, a federal permit or similar authorization for a major development project, or the interconnection of a significant private project into a federal project generally is considered a "major federal action" that requires review under NEPA. As part of the NEPA review, the federal agency considers a broad array of environmental impacts, including impacts on air quality, water quality, wildlife, historical and archaeological resources, geology, socioeconomics and aesthetics and alternatives to the project. A federal agency may decide to deny a permit based on its environmental review under NEPA, though in most cases a project would be redesigned to reduce impacts or agree to provide some form of mitigation to offset impacts before a denial is issued.

National Historic Preservation Act

U.S. federal agencies consider a project's impact on historical or archeological resources under the U.S. National Historic Preservation Act and may require us to conduct archeological surveys or take other measures to protect these resources. The National Historic Preservation Act requires federal agencies to evaluate the impact of all federally funded or permitted projects on historic properties (buildings, archaeological sites, etc.)

Other State and Local Programs

In addition to federal requirements, our U.S. projects, and any future U.S. projects we may acquire, are subject to a variety of state environmental review and permitting requirements. Many states where our projects are located, or may in the future be located, have laws that require state agencies to evaluate a broad array of environmental impacts before granting state permits. The state environmental review process often resembles the federal NEPA process and may be more stringent than the federal review. Our projects also often require state law based permits in addition to federal permits.

Our projects also are subject to local environmental and regulatory requirements, including county and municipal land use, zoning, building and transportation requirements. Local or state regulatory agencies may require modeling and measurement of permissible sound levels in connection with the permitting and approval of our projects. Local or state agencies also may require us to develop decommissioning plans for dismantling the project at the end of its functional life and establish financial assurances for carrying out the decommissioning plan.

Environmental Matters—Canada

We are required to obtain a range of environmental permits and other approvals to build and operate our Canadian projects, including, but not limited to, those described below from applicable Canadian federal, provincial, First Nations and municipal governmental authorities. In addition to being subject to these regulatory requirements, we could experience opposition from third parties, including, but not limited to, environmental non-governmental organizations, neighborhood groups, municipalities and First Nations when the permits were initially applied for or when there is an appeal proceeding after permits are issued. The delay or denial of a permit or the imposition of conditions that are costly or difficult to comply with can impair or even prevent the development of a project or can increase the cost so substantially that the project is no longer attractive to us.

Ontario Renewable Energy Approvals

Projects in Ontario are generally subject to Ontario's Environmental Protection Act, which requires proponents of significant renewable energy projects to obtain a Renewable Energy Approval (REA). The REA application requires a variety of studies on environmental, archeological and heritage issues. Significant public consultation, as well as consultation with indigenous communities, is also required. Before issuing a REA, the Ontario Ministry of the Environment, Conservation and Parks (MOECP) evaluates a broad range of potential impacts, including on wildlife, wetlands and water resources, communities, scenic areas, species and heritage resources, as well as impacts on people. This review can be time consuming and expensive, and an approval can be rejected or approved with conditions that are costly or difficult to comply with. REAs are also subject to appeal by third parties and can result and have resulted in lengthy appeal tribunal hearings. An exception to the requirement to obtain a REA permit as described above exists where the proposed project is being developed, constructed, and operated on federal reserve lands under the jurisdiction of a First Nation. In this circumstance, the First Nation may impose an environmental protection regime which would closely mirror the REA process, but it would be administered and monitored for compliance by the First Nation as opposed to MOECP.

Quebec Environmental Impact Assessment

Quebec's Environmental Impact Assessment (EIA) is a required permit for wind energy projects with a nameplate capacity above 10 MW. The EIA requires a variety of studies related to environmental, archeological and heritage issues. Significant public consultation, as well as consultation with indigenous communities, is also required. The culmination of this permitting process is the issuing of a project specific decree by the provincial council of ministers which may include conditions related to the construction and operation of a project that may be costly or difficult to comply with. Before issuing the decree, the Quebec Ministry of Environment evaluates a broad range of potential impacts, including on wildlife, wetlands and water resources, communities, scenic areas, species and heritage resources, as well as impacts on people.

Quebec Commission for the Protection of Agricultural Land

In addition to the EIA process, the other major permit in Quebec is granted by the Quebec Commission for the Protection of Agricultural Land. This permit is only required on land that is zoned agricultural. This permitting body may impose conditions on proponents to minimize footprints during both the construction phase and the operations phase.

Manitoba Environment Act

The Manitoba Environment Act requires proponents of significant projects to submit a proposal with the Manitoba Conservation Environmental Assessment & Licensing Branch, and to comply with Manitoba's environmental assessment process under the Environment

Act. This process will consider a similar range of impacts on the environment, the heritage and scenic values of an area and on people, communities and wildlife as the Ontario process, and brings with it similar risks.

British Columbia Environmental Assessment Act

When a major project is proposed in British Columbia, it must undergo an environmental assessment (EA) process. This process ensures that any potential environmental, economic, social, heritage and health effects that may occur during the lifetime of a major project are thoroughly assessed. The EA process is managed by the Environmental Assessment Office (EAO), a regulatory agency within the provincial government that works with and seeks input from environmental scientists, indigenous groups, proponents, the public, local governments, and federal and provincial agencies to ensure adverse effects are considered.

The EAO follows a defined process in the Environmental Assessment Act to conduct the assessment of a major project. The outcome of the process is the preparation of a detailed Assessment Report which is reviewed by the province for a determination as to whether the proposed project should proceed.

Endangered Species Legislation

Our Canadian renewable energy projects may be subject to endangered species legislation, either federally or provincially, which prohibits and imposes stringent penalties for harming endangered or threatened species and their habitats. Our projects may also be subject to the Migratory Birds Convention Act, which protects the habitat of migratory species, and which may also trigger federal "Species at Risk" requirements. Because the operation of wind turbines may result in injury or fatalities to birds and bats, avian and bat risk assessments are generally required both prior to permits being issued for projects and after commercial operations. Permits, authorizations or agreements may also be required under federal or provincial endangered species legislation if any species that are listed as endangered or threatened, or their habitats, are affected.

Other Approvals

Our Canadian projects, and any future projects we may acquire, are subject to a variety of other federal, provincial and municipal permitting and zoning requirements. Most provinces where our projects are located or may be located have laws that require provincial agencies to evaluate a broad array of environmental impacts before granting permits and approvals. These agencies evaluate similar issues as the permitting regimes above, including impact on wildlife, historic sites, aesthetics, wetlands and water resources, scenic areas, endangered and threatened species and communities. In addition, federal government approvals dealing with, among other things, aeronautics, fisheries, navigation or species protection may be required and could in some cases trigger additional environmental assessment requirements. Additional requirements related to the permitting of transmission lands may be applicable in some cases. Our projects are also subject to certain municipal requirements, including land use and zoning requirements, as well as requirements for building permits and other municipal approvals that can be difficult or costly to comply with and impair or prevent the development of a project.

Environmental Matters - Japan

We are required to obtain a range of environmental permits and other approvals from various governmental agencies in Japan, including at the prefectural and municipal level, to develop, construct and operate our projects, including, but not limited to, the items described below.

Ministry of the Environment

The Ministry of the Environment is a Cabinet-level ministry within the government of Japan that is responsible for domestic and global environmental conservation, pollution control and nature conservation.

Environmental Impact Assessment Law

The Environmental Impact Assessment Law is applied to wind power projects that may significantly impact the environment. Depending on the size of the project, an environmental impact assessment would be required by the project owner prior to development with the intent of incorporating environmental considerations into the project design.

Management, Disposal and Remediation of Hazardous Substances

We own and lease real property and may be subject to requirements regarding the storage, use and disposal of petroleum products and hazardous substances, including spill prevention, control and counter-measure requirements. If our owned or leased properties are contaminated, whether during or prior to our ownership or operation, we could be responsible for the costs of investigation and cleanup and for any related liabilities, including claims for damage to property, persons or natural resources. That responsibility may arise even if we were not at fault and did not cause or were not aware of the contamination. In addition, waste we generate is at times sent to third-party disposal facilities. If those facilities become contaminated, we and any other persons who arranged for the disposal or treatment of hazardous substances at those sites may be jointly and severally responsible for the costs of investigation and remediation, as well as for any claims for damage to third parties, their property or natural resources. Employees

As of December 31, 2018, we had approximately 209 full-time employees. None of our employees are represented by a labor union or covered by any collective bargaining agreement.

Available Information

We make our United States Securities and Exchange Commission (SEC) filings, including our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, available free of charge on our website, www.patternenergy.com, as soon as reasonably practicable after those documents are electronically filed with or furnished to the SEC. The information and materials available on our website are not incorporated by reference into this Form 10-K. The SEC maintains a website that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors.

RISK FACTORS

You should carefully consider the following risks, together with other information provided to you in this Form 10-K. If any of the following risks were to occur, our business prospects, financial condition, results of operations and liquidity could be materially adversely affected. In that case, we might have to decrease, or may not be able to pay, dividends on our Class A shares, the trading price of our Class A shares could decline and you could lose all or part of your investment. The risks described below are not the only risks facing our company. Risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business prospects, financial condition and results of operations and liquidity.

Risks Related to the Business Segments in which We Operate

Electricity generated from wind and solar energy depends heavily on suitable wind and solar conditions, respectively. If such conditions are unfavorable or below our expectations, our projects' electricity generation and the revenue generated from our projects may be substantially below our expectations.

The revenue generated by our projects is principally dependent on the number of MWh generated in a given time period. The quantity of electricity generation from renewable energy projects depends heavily on environmental conditions, which are variable. Variability in wind and solar conditions can cause our project revenues to vary significantly from period to period. We base our decisions about which projects to acquire as well as our electricity generation estimates, in part, on the findings of long-term wind, solar and other meteorological studies conducted on the project site and its region. For wind projects, such studies, measure the wind's speed, prevailing direction and seasonal variations, and projections of wind resources also rely upon assumptions about turbine placement, wind turbine power curves, interference between turbines. Similarly for solar projects, such studies measure solar irradiation and seasonal variations, and projections of solar resources also rely upon assumptions about panel placement, power curves for solar panels and arrays, and shading. Effects of vegetation, land use and terrain, which involve uncertainty and require us to exercise considerable judgment, also may have significant effects on electricity generated by a project. We may make incorrect assumptions in conducting these wind, solar and other meteorological studies. Any of these factors could cause our projects to generate less electricity than we expect and reduce our revenue from electricity sales, which could have a material adverse effect on our business prospects, financial condition and results of operations.

Even if an operating project's historical wind and solar resources are consistent with our long-term estimates, the unpredictable nature of meteorological conditions can result in daily, monthly and yearly material deviations from the average amount of such renewable resource we may anticipate during a particular period. If such resources at a project are materially below the average levels we expect for a particular period, our revenue from electricity sales from the project could correspondingly be less than expected. A diversified portfolio of projects utilizing different renewable resources located in different geographical areas tends to reduce the magnitude of the deviation, but material deviations may still occur. Our cash available for distribution is most directly affected by the volume of electricity generated and sold by our projects. However, for a static portfolio of projects, our consolidated expenses, including operating expenses and interest payments on indebtedness, have less variability than the volume of electricity generated and sold. Accordingly, decreases in the volume of electricity generated and sold by our projects typically result in a proportionately greater decrease in our cash available for distribution. See Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operation-Factors that Significantly Affect our Business-Factors Affecting our Operational Results-Electricity Sales and Energy Derivative Settlements of Our Operating Projects." A reduction in electricity generation and sales, whether due to the inaccuracy of wind or solar energy assessments or otherwise, could lead to a number of material adverse consequences for our business, including: our projects' failure to produce sufficient electricity to meet our commitments under our PPAs, hedge arrangements or contracts for sale of RECs, which could result in our having to purchase electricity or RECs on the open market to cover our obligations or result in the payment of damages or the termination of a PPA; our projects not generating sufficient cash flow to make payments of principal and interest as they become due on project-related debt, distributing sufficient cash flow to pay dividends to holders of our Class A shares, or service our corporate debt. For example, certain of our projects have experienced lower than expected production and merchant power prices, as well as congestion on transmission systems upon which such projects rely upon, resulting in those projects failing to pass financial tests that measure cumulative cash distributions to the members. This has in the past, and may in the future, result in a temporary change of the cash percentage to be directed to the tax equity members until the shortfall is remedied. See "-Risks Related to Ownership of our Class A Shares - Our cash available for distribution to holders of our Class A shares may be reduced as a result of restrictions on our subsidiaries' cash distributions to us under the terms of their indebtedness, or in the event certain specified events occurred under our tax equity arrangements that change the percentage of cash distributions to be made to the tax equity investors;" and our projects' hedging arrangements being ineffective or more costly.

We have invested in Pattern Development which exposes us directly to project development risks.

Since July 2017, we have funded an aggregate of \$183 million in capital contributions into Pattern Development in which we hold an approximate 29% ownership interest. We have the right, but not the obligation, to participate in subsequent capital calls for a total commitment of up to \$300 million, and if we do not participate in all future capital calls, our ownership interest in Pattern Development will decrease.

As a result of our investment in Pattern Development, we are exposed directly to project development risks, including permitting challenges, failure to secure PPAs, failure to procure the requisite financing, equipment or interconnection, or an inability to satisfy the conditions to effectiveness of project agreements such as PPAs. In the event we elected to participate in additional capital calls or otherwise decided to invest in other project development opportunities, we would further expose ourselves directly to such project development risks. Generally, project development may entail risks of making investments in projects that cannot profitably be built, and we are, and if we invested further could be further, exposed to significant investment activities that require significant capital prior to having certainty that a project can move forward. We may lose money invested without generating returns, particularly since a large portion of such investments go into overhead which cannot be recovered. No assurances can be given that we will be successful in project development activities we undertake, whether through the investment in Pattern Development or otherwise, which can diminish our capital available for investment in operating power projects and adversely impact our business prospects, financial condition and results of operations.

A prolonged environment of low prices for natural gas, other conventional fuel sources, or competing renewable resources could have a material adverse effect on our long-term business prospects, financial condition and results of operations.

Historically low prices for traditional fossil fuels, particularly natural gas, and competing renewable resources could cause demand for our wind and solar power to decrease and adversely affect the price of the electricity we generate for sale on a spot-market basis. Excessive building of competing renewable resources in a limited geographic area (particularly in portions of ERCOT) has, and may continue to, result in congestion and curtailment which in turn has, and could continue to, adversely affect pricing available on the spot-market. See Item 7A "Quantitative and Qualitative Disclosures about Market Risk-Commodity Price Risk." Low spot-market power prices, combined with other factors, could have a material adverse effect on our results of operations and cash available for distribution. Additionally, cheaper conventional fuel sources or competing renewable resources could also have a negative impact on the power prices we are able

to negotiate upon the expiration of our current power sale agreements or upon entering into a power sale agreement for a subsequently acquired power project. As a result, the price of our electricity or RECs subject to the open market could be materially and adversely affected, which could, in turn, have a material adverse effect on our results of operations and cash available for distribution.

Climate change may have the long-term effect of changing meteorological patterns at our projects which could have a material adverse effect on our business prospects, financial condition, results of operations and ability to make cash distributions to our investors

Climate change may have the long-term effect of changing meteorological patterns, including wind and factors that affect solar irradiation (such as cloud cover), at our projects. Changing meteorological patterns could cause changes in expected electricity generation. These events could also degrade equipment or components and the interconnection and transmission facilities' lives or maintenance costs. We may face decreased revenues from a project and increased project expense which could have a material adverse effect on our business prospects, financial condition, results of operations and ability to make cash distributions to our investors.

Our projects rely on a limited number of key power purchasers.

There are a limited number of possible power purchasers for electricity and RECs produced in a given geographic location. Because our projects depend on sales of electricity and RECs to certain key power purchasers, our projects are highly dependent upon these power purchasers and such power purchasers fulfilling their contractual obligations under their respective PPAs. Upon a power purchase arrangement coming to the end of its term, no assurances can be given that we will be able to enter into new arrangements with the same or another power purchaser, if we did not enter into a new arrangement that merchant prices for power would be as favorable as the prices under the prior power purchase arrangements, or even if we are able to enter into a new arrangement that the terms of such arrangement would be upon terms as favorable to us as the prior power purchase arrangements.

In addition, our projects' power purchasers may not comply with their contractual payment obligations or may become subject to insolvency or liquidation proceedings during the term of the relevant contracts, and, in such event, we may not be able to find another purchaser on similar or favorable terms or at all. We are also exposed to the creditworthiness of our power purchasers and there is no guarantee that any power purchaser will maintain its credit rating, if any. For example, the power purchasers at our 101 MW Santa Isabel project in Puerto Rico and at our 101 MW Hatchet Ridge project in California have been experiencing difficulties as further described in the risk factors below. To the extent that any of our projects' power purchasers are, or are controlled by, governmental entities, our projects may also be subject to legislative or other political action that impairs their contractual performance. We also note that our key power purchasers may seek to renegotiate or terminate PPAs prior to the end of their term that were contracted for at a time when the prices for power were higher than they may currently be in the relevant markets by asserting that we have not performed our obligations under our contractual commitments under a PPA. Each such situation individually or in the aggregate could have a material adverse effect on our business prospects, financial condition and results of operations.

The power purchasers at our Santa Isabel project in Puerto Rico and our Hatchet Ridge project in California have been experiencing difficulties that may affect these projects.

Our 101 MW Santa Isabel project located in Puerto Rico sells 100% of its electricity generation to Puerto Rico Electric Power Authority (PREPA) under a 20-year PPA. In July 2017, PREPA filed a voluntary petition for relief in the U.S. District Court for the District of Puerto Rico. Our 101 MW Hatchet Ridge project located in California sells 100% of its electricity generation to Pacific Gas & Electric Company (PG&E) under a 15-year PPA. On January 29, 2019, PG&E filed for reorganization under Chapter 11 of the U.S bankruptcy code. While each of PREPA and PG&E have through February 22, 2019, made payments of all amounts due under the respective PPAs for production, including both pre-petition receivables and post-petition receivables, no assurances can be given that either PREPA or PG&E will pay future receivables. Furthermore, under the Puerto Rico Oversight, Management, and Economic Stability Act (or PROMESA) applicable to PREPA, and the U.S bankruptcy code applicable to PG&E, each of PREPA and PG&E will eventually need to determine whether to assume or reject its respective PPA, subject to court approval. A rejection of a PPA would likely have a material adverse effect on our business prospects, financial condition and results of operations. The fact of PREPA's insolvency and its filing for bankruptcy each constituted an event of default under its financing agreement. However, in August 2017, the lender issued a letter withdrawing the

event of default associated with the PREPA insolvency. Pursuant to our agreement with the lender, the Santa Isabel project may not make distributions to us until such time as lender consents (which will not be unreasonably withheld if PREPA assumes the PPA). The fact of PG&E's insolvency and its filing under the U.S. bankruptcy code does not in and of itself constitute an event of default under the project's financing agreements. In both cases, a failure to make future payments under either PPA or rejection of a PPA would constitute events of default under each projects' financing agreements. No assurances can be given that PREPA or PG&E, as the case may be, will determine to assume the respective PPA, will not take actions that separately constitute an event of default under our financing agreements, or that Santa Isabel or Hatchet Ridge will be able to remain current with respect to its payments under the financing agreements. In any such event, an event of default under the financing agreements would occur and the lenders may decide in such c

ircumstance to accelerate and declare the entire amount of debt under the respective financing agreement immediately due and payable. Even though each of the Santa Isabel and Hatchet Ridge financing agreements are non-recourse to us, they are secured by each respective project and any exercise of remedies by the respective lenders could have a material adverse effect on our business prospects, financial condition and results of operations.

Operation and maintenance problems at our renewable energy projects including natural events may cause our electricity generation to fall below our expectations.

Our electricity generation levels depend upon our ability to maintain the working order of our wind turbines, solar arrays and balance of the plant. A natural disaster, severe weather, accident, failure of major equipment, shortage of or inability to acquire critical replacement or spare parts, failure in the operation of any future transmission facilities that we may acquire, including the failure of interconnection to available electricity transmission or distribution networks, could damage or require us to shut down our turbines, solar arrays or related equipment and facilities, impeding our ability to maintain and operate our facilities and decreasing electricity generation levels and our revenues. For example, Hurricane Maria in 2017 resulted in damage to PREPA's transmission and distribution assets that caused our Santa Isabel project in Puerto Rico to be shut-in until mid-February 2018. In addition, several of our projects had previously experienced blade failures, and no assurances can be given that potential equipment deficiencies will not in fact continue to occur, that we will always have warranty coverage for any such defects, that the warranty provider would fulfill its obligations under such warranty coverage (including any liquidated damages compensation provisions), or that any such effects will not have a material adverse effect on our business prospects, financial condition and results of operation.

We typically enter into warranty agreements with the turbine manufacturer for two to ten-year terms, however, such agreements are typically subject to an aggregate maximum liability cap. In addition, we have a 20-year performance ratio guarantee from the EPC contractor for our solar facilities in Japan, subject to an annual performance loss factor and adjustments for solar irradiation and temperature, which effectively provides a production guarantee for such solar facilities. However, there can be no assurance that such manufacturers or contractors, or other third-party service provider, will be able to fulfill its contractual obligations. In addition, such agreements can vary as to what equipment maintenance risks are fully assumed by the service provider and what equipment failure risks will be repaired at the owner's cost.

As warranty terms with the manufacturer expire, we have entered and intend to continue entering into revised long-term turbine manufacturer service arrangements at certain of our projects pursuant to which the turbine manufacturer continues to provide routine and corrective maintenance service, but we are responsible for a portion of the maintenance and repairs, including on major component parts. While the revised service arrangements reduce fixed contract costs, in the event of unexpectedly high turbine component failures for which we as owner have assumed responsibility, we may face decreased revenues of a project and increased project expense which could have a material adverse effect on our business prospects, financial condition, results of operations and ability to make cash distributions to our investors. We expect over time in the future to continue taking on additional risks as an owner, including increased self-performance of maintenance and service work with our own technicians instead of utilizing service providers, which will have expected cost benefits, but will similarly come with additional increased risks and reduced third party warranty and guarantee protections.

Replacement and spare parts for wind turbines and key pieces of electrical equipment at both our wind and solar projects may be difficult or costly to acquire or may be unavailable. Sources for some significant spare parts and other equipment are often located outside of the jurisdictions in which our power projects operate. Additionally, our operating projects generally do not hold spare substation main transformers. These transformers are designed specifically for each power project, and order lead times can be lengthy. If one of our projects had to replace any of its substation main transformers, it would be unable to sell all of its power until a replacement is installed. To the extent we experience a prolonged interruption at one of our operating projects due to natural events or operational problems and such events are not fully covered by insurance, our electricity generation levels and revenues could materially decrease, which could have a material adverse effect on our business prospects, financial condition and results of operation.

Our operations are subject to numerous environmental, health and safety laws and regulations.

Our projects are subject to numerous environmental, health and safety laws and regulations in each of the jurisdictions in which our projects operate or will operate. These laws and regulations, and associated best management practices, require that our projects obtain and maintain permits and approvals and engage in review processes and implement environmental, health and safety programs and procedures to control risks associated with the siting, construction, operation and decommissioning of power projects. To obtain permits and other approvals, some projects are, in certain cases, required to undergo environmental impact assessments and undertake programs to protect and maintain local endangered or threatened species. For example, in connection with a permit we obtained at our Spring Valley wind facility, we had to adopt a mitigation plan with respect to injuries and fatalities to golden eagles, and were required to establish a

process in the event of incidents, including reporting to the U.S. Fish and Wildlife Service. In addition, in connection with certain of our projects in Canada, plans to mitigate bat incidents were required to be adopted during the permitting process, and aspects of such plans have from time to time been implemented when bat incidents exceeded certain predetermined thresholds (such as raising cut in speeds for turbines during certain hours when bats are active). If such programs are not successful, our projects could be subject to increased levels of mitigation, operational curtailment, penalties or revocation of our permits.

Violations of environmental and other laws, regulations and permit requirements, including certain violations of laws protecting wetlands, migratory birds, bald and golden eagles and threatened or endangered species, may also result in criminal sanctions or injunctions. In addition, if our projects do not comply with applicable laws, regulations or permit requirements, or if there are endangered or threatened species fatalities at our projects, we may be required to pay penalties or fines or curtail or cease operations of the affected projects.

Certain environmental laws impose liability on current and previous owners and operators of real property for the cost of removal or remediation of hazardous substances, even if the owner or operator did not know of, or was not responsible for, the release of such hazardous substances. In addition to actions brought by governmental agencies, private plaintiffs may also bring claims arising from the presence of hazardous substances on a property or exposure to such substances. Our projects' liabilities at properties we own or operate arising from past releases of, or exposure to, hazardous substances could have a material adverse effect on our business prospects, financial condition and results of operations.

Environmental, health and safety laws, regulations and permit requirements (or other similar requirements, such as requirements related to noise) may change and become more stringent. Any such changes could require our projects to incur additional material costs or cause our projects to suffer adverse consequences. For example, the Ministry of Environment in Ontario has established regulatory requirements governing noise restrictions for wind farms which are an integral part of the permitting framework for our projects in certain jurisdictions. In the event of changes in either the regulatory requirements or permitting framework prior to confirmation that the projects have met the requirements through acoustic testing, there is risk that our projects that were designed for compliance within the existing framework and requirements for noise could be exposed to more stringent requirements. These risks are enhanced because testing for compliance with noise requirements is technically complex, carries some degree of uncertainty, and does not have significant precedent in that market. In the event of a determination of noncompliance, there is risk that the necessary mitigation, which would likely need to occur during periods of higher wind speeds, could require curtailment of energy production at the facility, with a resulting reduction in revenues.

Our projects' costs of complying with current and future environmental, health and safety laws, regulations and permit requirements (or other similar requirements), and any liabilities, fines or other sanctions resulting from violations of them, could have a material adverse effect on our business prospects, financial condition and results of operations. Construction projects may not be completed on time, and construction costs could increase to levels that make a project too expensive to complete or make the return on investment in that project less than expected. There may be delays or unexpected developments in completing construction projects. Whether such delays or unexpected developments occur at construction projects we own or (because we own an approximate 29% interest in Pattern Development) construction projects at Pattern Development, construction costs at projects which exceed expectations could reduce or eliminate the returns expected from such projects. Construction projects are typically designed and constructed under fixed-price and schedule engineering, procurement, and construction contracts with reputable construction and equipment suppliers, and would typically have liquidated damages provisions for non-performance by the contractors subject to specified limitations on the amount of damages that can recover from the contractor. Significant construction delays or construction cost increases may occur as a result of underperformance of these contractors and equipment suppliers, as well as other suppliers, to the projects. No assurances can be given that disputes with project construction providers will not arise in the future. While we and Pattern Development will attempt to reach a settlement if disputes do arise, no assurances can be given that we or Pattern Development would actually reach a settlement or that any such settlement amount would be covered by the remaining budgeted project contingencies. If an equitable settlement cannot be reached, arbitration or legal action could be commenced, and any final judgment or decision could result in increased costs which could make the return on investment in the project less than expected.

Additionally, various other factors could contribute to construction-cost overruns and construction delays, including: inclement weather conditions;

failure to receive generating equipment or other critical components and equipment necessary to maintain the operating capacity of our projects, in a timely manner or at all;

failure to complete interconnection to transmission networks, which relies on several third parties, including interconnection facilities provided by local utilities;

failure to maintain all necessary rights to land access and use;

failure to receive quality and timely performance of third-party services;

failure to maintain environmental and other permits or approvals;

failure to meet domestic content requirements;

appeals of environmental and other permits or approvals that are held;

4awful or unlawful protests by or work stoppages resulting from local community objections to a project;

shortage of skilled labor or key construction equipment on the part of contractors;

geopolitical risks including risk of tax and tariff law changes;

adverse environmental and geological conditions; and

force majeure or other events out of our control.

Any of these factors could give rise to construction delays and construction costs in excess of expectations. These circumstances could prevent construction projects from commencing operations or from meeting original expectations about how much electricity they will generate or the returns they will achieve. In addition, substantial delays could cause defaults under financing agreements or under PPAs that require completion of project construction by a certain date at specified performance levels or could result in the loss or reduction of expected tax benefits. An inability to transition construction projects into financially successful operating projects by either us or Pattern Development would have a material adverse effect on our business prospects, financial condition and results of operations and our ability to pay dividends.

The expansion of our international operations into Japan subjects us to a number of risks, and if we are unable to effectively manage these risks, and similar risks if we expand into other markets outside of the United States and Canada, our business prospects, financial condition and results of operations and liquidity could be materially and adversely affected.

In March 2018, we entered into the Japanese renewables market, and our 206 MW portfolio of projects in Japan consists of two operating solar projects (Futtsu and Kanagi), two operating wind projects (Ohorayama and Otsuki), and one in-construction wind project (Tsugaru). We expect our portfolio and operations in Japan to continue to grow. The expansion of our operations into markets outside of the United States and Canada exposes us to risks relating to political, regulatory, labor, and tax conditions in these foreign countries. In addition, we are exposed to risks including:

difficulty with staffing and managing overseas operations, which may be exacerbated as a result of distance, time zone, language, and cultural differences;

difficulties and costs relating to compliance with different commercial, legal and regulatory requirements; failure to develop appropriate risk management and internal control structures tailored to overseas operations; challenges in coordinating and integrating systems, policies, and procedures, such as operational, financial and accounting, and information technology;

the need to devote a significant amount of our management's time and effort to integrate and coordinate the international operations with our other operations; and

fluctuations in currency exchange rates.

If we are unable to effectively manage these risks, they could materially and adversely affect our business prospects, financial condition, and results of operations and liquidity.

Our projects rely on interconnections to transmission lines and other transmission facilities that are owned and operated by third parties which exposes us to risks. Our projects are also exposed to interconnection and transmission facility development and curtailment risks, which may delay the completion of any construction projects or reduce the return to us on those investments.

Our projects depend upon interconnection to electric transmission lines owned and operated by regulated utilities to deliver the electricity we generate. A failure or delay in the operation or development of these interconnection or transmission facilities could result in our losing revenues because such a failure or delay could limit the amount of power our operating projects deliver or delay the completion of any construction projects. For example, we have experienced situations where the substation to which a project was required to deliver power under its PPA had been shut down for maintenance and we needed to then take steps to mitigate the transmission outage at the delivery substation, including making alternative transmission arrangements to deliver power at an alternative substation through alternative short term transmission and revenue arrangements and selling environmental attributes to a third

party. If similar circumstances occurred in the future, there could be no assurances that we would be able to make alternative transmission arrangements or the revenues

produced from any alternative arrangements would be equivalent to the revenues that would have been generated had such transmission outage not occurred. Furthermore, individual alternative arrangements made to mitigate the transmission outage may present their own risks, such as possible curtailment risks on the alternative transmission arrangements or pricing risks in the merchant power market, which could adversely affect the overall efficacy of any mitigation efforts. If we were unable to mitigate potential losses, other future sustained transmission outages at a delivery substation could have a material adverse effect on our business prospects, financial condition and results of operations.

In addition, certain of our operating projects' generation of electricity may be curtailed without compensation (or, in some cases, choose to continue operating but accept negative power prices) due to transmission limitations or limitations on the electricity grid's ability to accommodate intermittent electricity generating sources, reducing our revenues and impairing our ability to capitalize fully on a particular project's potential. Such a failure or curtailment at levels above our expectations could have a material adverse effect on our business prospects, financial condition and results of operations. For example, in certain geographic areas of the ERCOT market in Texas, construction of renewable energy projects has exceeded the available capacity of the existing transmission infrastructure resulting in localized congestion on transmission facilities utilized by certain of our projects. While these projects have financial hedges that partially protect revenues against movement in broader power markets, these instruments generally do not provide protection against localized congestion impacts, which are borne by the projects. In addition, planned or forced outages of transmission circuits in such strained areas of the grid can, and has, compounded the adverse impact on our operations. While efforts to construct additional transmission facilities are underway, there is no assurance that such additional facilities will be sufficient to relieve congestion, or that construction of new generation facilities will not continue to exceed the capacity of any added transmission in the future.

In addition to the risks described above regarding the broader electric grid, many of our projects also own private transmission lines to deliver our power to available electricity transmission or distribution networks. In some cases, these facilities may span significant distances. A failure in our operation of these facilities that causes the facilities to be temporarily out of service, or subject to reduced service, could result in lost revenues because it could limit the amount of electricity our operating projects are able to deliver. In addition, in many of the markets in which we operate or are looking to expand operations, should there be any excess capacity available in those generator lead facilities, and should a third party request access to such capacity, the relevant regulatory authority in such jurisdiction, such as FERC in the United States, or other authorities might, require our projects to provide service over such facilities for that excess capacity to the requesting third party at regulated rates. Should this occur in markets with such regulations, the projects could be subject to additional regulatory risks and costly compliance burdens associated with being considered the owner and operator of a transmission facility.

New projects being developed that we may acquire may need governmental approvals and permits, including environmental approvals and permits, for construction and operation. Any failure to obtain or maintain in effect necessary permits could adversely affect the amount of our growth.

The design, construction and operation of wind, solar and transmission projects are highly regulated, require various governmental approvals and permits, including environmental approvals and permits, and may be subject to the imposition of related conditions that vary by jurisdiction. In some cases, these approvals and permits require periodic renewal and a subsequently issued permit may not be consistent with the permit initially issued. In other cases, these permits may require compliance with terms that can change over time. We cannot predict whether all permits required for a given project will be granted or whether the conditions associated with the permits, as such conditions may change over time, will be achievable. The denial or loss of a permit essential to a project, or the imposition of impractical or burdensome conditions upon renewal or over time, could impair our ability to construct and operate a project. In addition, we cannot predict whether seeking the permits will attract significant opposition or whether the permitting process will be lengthened due to complexities, legal claims or appeals. Delay in the review and permitting process for a project can impair or delay the ability to develop, construct, or acquire a project or increase the cost such that the project is no longer attractive to us.

In developing certain of our projects, Pattern Energy Group LP experienced delays in obtaining non-appealable permits and we, Pattern Energy Group LP, and/or Pattern Development may experience delays in the future. For example, when we acquired our Ocotillo project, it was then the subject of four active lawsuits brought by a variety of

project opponents, all of which challenged the prior issuance of Ocotillo's primary environmental analysis and right-of-way entitlement. We had commenced commercial operations at the Ocotillo project in anticipation of securing favorable rulings on these lawsuits. In Ontario, in prior years anti-wind advocacy groups have opposed the Renewable Energy Approval environmental permit granted to our South Kent, Grand, and Armow wind projects by commencing proceedings before the Ontario Environmental Review Tribunal. Each of these appeals ultimately was unsuccessful and dismissed by the Tribunal.

We are subject to the risk of being unable to complete construction of projects, or continue operation of our projects, if any of the key permits are revoked or permit conditions are violated. If this were to occur at any current or future project, we would likely lose a significant

portion of our investment in the project and could incur a loss as a result, which would have a material adverse effect on our business prospects, financial condition and results of operations.

The loss of one or more of our or Pattern Development's executive officers or key employees may adversely affect the ability to effectively complete the development of projects, implement our growth strategy, complete construction projects on schedule, or manage our operating projects.

We depend on our experienced management team and (because we own an approximate 29% interest in Pattern Development) Pattern Development's officers and key employees. The loss of one or more of our or Pattern Development's executives or key employees could have a negative impact on us, our business, or ability to grow. We also depend on the ability of ourselves and Pattern Development to retain and motivate key employees and attract qualified new employees. Because the renewable power industry is relatively new, there is a scarcity of experienced employees in the industry. We and Pattern Development may not be able to replace departing members of their management teams or key employees. Integrating new executives into management teams and training new employees with no prior experience in the power industry could prove disruptive to projects, require a disproportionate amount of resources and management attention and ultimately prove unsuccessful. An inability to attract and retain sufficient technical and managerial personnel could limit the ability of us or Pattern Development to effectively manage, complete the development of projects, implement our growth strategy, complete any construction projects on schedule and within budget, or manage our operating projects, which could have a material adverse effect on our business prospects, financial condition and results of operations.

The employee transfer may adversely affect our costs.

Under the Amended and Restated Multilateral Management Services Agreement ("A&R Multilateral Services Agreement") we entered into with both Pattern Energy Group LP and Pattern Development, we continue to have the option to cause the employees of Pattern Energy Group LP to become our employees. We refer to this event as the Pattern Energy Group LP employee transfer, and we may effect such employee transfer after the earliest to occur of (1) notice from Pattern Energy Group LP that it will be completing a wind-down, (2) June 16, 2020, and (3) the failure of Pattern Energy Group LP to provide the resources and services called for under the A&R Multilateral Services Agreement after notice and opportunities to cure. In addition, while Pattern Development currently only has employees through its ownership of interests in GPI in Japan, the A&R Multilateral Services Agreement provides for certain circumstances pursuant to which we can require Pattern Development to cause its employees (if any) to become our employees. We refer to this event as the Pattern Development employee transfer. Following the occurrence of either a Pattern Energy Group LP employee transfer event to us or (in the event Pattern Development has employees) a Pattern Development employee transfer event to us, we would incur increased costs associated with employing a larger number of employees, and there is no assurance that the utilization of services from Pattern Energy Group LP and Pattern Development will be sufficient to cover the costs of the employees which could then have a material adverse effect on our business prospects, financial condition and results of operation.

Our use and enjoyment of real property rights for our projects may be adversely affected by the rights of lienholders and leaseholders that are superior to those of the grantors of those real property rights to our projects.

Our projects generally are, and any of our future projects are likely to be, located on land occupied pursuant to long-term easements, leases and rights-of-way. The ownership interests in the land subject to these easements, leases and rights-of-way may be subject to mortgages securing loans or other liens (such as tax liens) and other easements, lease rights and rights-of-way of third parties (such as leases of oil or mineral rights) that were created prior to our projects' easements, leases and rights-of-way. As a result, certain of our projects' rights under these easements, lease rights or rights-of-way may be subject, and subordinate, to the rights of those third parties. We perform title searches, obtain title insurance and enter into non-disturbance agreements to protect ourselves against these risks. Such efforts may, however, be inadequate to protect our operating projects against all risk of loss of our rights to use the land on which our projects are located, which could have a material adverse effect on our business prospects, financial condition and results of operations. In addition, certain lands, such as lands under the jurisdiction of the United States Department of Interior's Bureau of Land Management (BLM), are subject to contractual rights that permit the BLM to periodically adjust rent due on properties and other obligations, such as the amount of required reclamation security, to market terms. Any such loss or curtailment of our rights to use the land on which our projects are located, any increase in rent due, or any increase in other obligations with respect to such lands could have a material adverse

effect on our business prospects, financial condition and results of operations.

Our operating projects are, and other future projects may be, subject to various governmental regulations, approvals, and compliance requirements that regulate the sale of electricity, which could have a material adverse effect on our business prospects, financial condition and results of operations.

Our current projects in operation in the United States are operating as EWGs as defined under PUHCA and therefore are exempt from certain regulation under PUHCA. Other than Gulf Wind, Panhandle 1, Panhandle 2, and Logan's Gap, our operating projects in the United

States are, however, public utilities under the Federal Power Act subject to rate regulation by FERC. Our future projects in the United States will also likely be subject to such rate regulation once they are placed into service. Our projects in the United States that are subject to FERC rate regulation are required to obtain acceptance of their rate schedules for wholesale sales of energy (i.e., not retail sales to consumers), capacity and ancillary services, including their ability to charge "market-based rates." FERC may revoke or revise an entity's authorization to make wholesale sales at market-based rates if FERC subsequently determines that such entity and its affiliates can exercise horizontal or vertical market power, create barriers to entry or engage in abusive affiliate transactions or market manipulation. In addition, public utilities in the United States are subject to FERC reporting requirements that impose administrative burdens and that, if violated, can expose the company to criminal and civil penalties or other risks.

Most of our North American projects are located in regions in which the wholesale electric markets are administered by ISOs and RTOs. Several of our current operating projects are subject to CAISO which is the ISO that prescribes rules for the terms of participation in the California energy market; the ERCOT, which is the ISO that prescribes the rules for and terms of participation in the Texas energy market; and IESO, which is the ISO that administers the wholesale electricity market in Ontario. The Southwest Power Pool is the RTO and regional market administrator for our Post Rock project. Lost Creek is in the Associated Electric Cooperative, Inc. a subregion of the SERC Reliability Corporation. Amazon Wind is in the PJM RTO. Many of these entities can impose rules, restrictions and terms of service that are quasi-regulatory in nature and can have a material adverse impact on our business. For example, ISOs and RTOs have developed bid-based locational pricing rules for the energy markets that they administer. In addition, most ISOs and RTOs have also developed bidding, scheduling and market behavior rules, both to curb the potential exercise of market power by electricity generating companies and to ensure certain market functions and system reliability. These actions could materially adversely affect our ability to sell, and the price we receive for, our energy, capacity and ancillary services.

All of our current operating projects located in North America are also subject to the reliability standards of the NERC. If we fail to comply with the mandatory reliability standards, we could be subject to sanctions, including substantial monetary penalties. Although our U.S. projects are not subject to state utility regulation because our projects sell power exclusively on a wholesale basis, we are subject to certain state regulations that may affect the sale of electricity from our projects, the operations of our projects, as well as the potential for state electricity taxes. All of our current operating projects in Canada are subject to exclusive provincial regulatory authority with respect to the generation and production of electricity, which varies across provincial jurisdictions. Changes in regulatory treatment at the state and provincial level are difficult to predict and could have a significant impact on our ability to operate and on our financial condition and results of operations.

Our industry could be subject to increased regulatory oversight or changes in government policies that could have adverse effects.

Our industry could be subject to increased regulatory oversight. Changing regulatory policies and other actions by governments and third parties with respect to curtailment of electricity generation, electricity grid management restrictions, interconnection rules, wholesale electricity market design and transmission may all have the effect of limiting the revenues from, and increasing the operating costs of, our projects which could have a material adverse effect on our business, financial condition and results of operations.

Due to regulatory restructuring initiatives at the federal, provincial and state levels, the electricity industry has undergone changes over the past several years. Future government initiatives will further change the electricity industry. Some of these initiatives may delay or reverse the movement towards competitive markets. We cannot predict the future design of wholesale power markets or the ultimate effect that on-going regulatory changes will have on our business prospects, financial condition and results of operations.

In addition, renewable energy policies may also change dramatically as a result of changes in government or political climate. For example, the current administration in Ontario made pledges during the 2018 election process to wind down certain contracts for renewable power projects that are in the pre-construction phase. We currently have no information to suggest that power contracts for operating projects in Ontario will be affected by these changes or by future policy changes. However, no assurances can be given that the current administration will not seek to amend renewable power contracts for operating projects, which could include contracts for our projects in Ontario, and which could have a material adverse effect on our business prospects, financial condition and results of operations, if it were

to occur.

Our projects are not able to insure against all potential risks and may become subject to higher insurance premiums. Our projects are exposed to the risks inherent in the construction and operation of wind, solar and transmission power projects, such as breakdowns, manufacturing defects, natural disasters, terrorist attacks and sabotage. We are also exposed to environmental risks. We have insurance policies covering certain risks associated with our business. Our insurance policies do not, however, cover losses as a result of certain force majeure events or terrorism. In addition, our insurance policies for our projects may cover losses as a result of certain types of natural disasters or sabotage, among other things, but such coverage is not always available in the insurance market on commercially reasonable terms and is often capped at predetermined limits that may not be adequate. Our insurance policies are subject to annual review by our insurers and may not be renewed on similar or favorable terms or at all. A serious uninsured loss or a loss

significantly exceeding the limits of our insurance policies could have a material adverse effect on our business prospects, financial condition and results of operations.

Currency exchange rate fluctuations may have an impact on our financial results and condition.

We have exposures to currency exchange rate fluctuations, primarily the Canadian dollar and Japanese ven, related to owning and operating part of our business outside of the United States. A portion of our revenue for the years ended December 31, 2018, 2017 and 2016 was denominated in currencies other than the U.S. dollar, and we expect net revenue from non-U.S. dollar markets to continue to represent a portion of our net revenue. We manage our currency exposure through a variety of methods, including efforts to match our asset and liabilities in the same currencies, mainly by raising local currency debt. In addition, we may use foreign currency forward contracts to, in part, manage short and medium term fluctuations in our dividends from our facilities located outside the United States. However, any measures that we have implemented or may implement in the future to reduce the effect of currency exchange rate fluctuations and other risks of our global operations may not be effective or may be expensive. We cannot provide assurance that currency exchange rate fluctuations will not otherwise have a material adverse effect on our financial condition or results of operations or cause significant fluctuations in quarterly and annual results of operations. Foreign currency translation risk arises upon the translation of balance sheet and statement of operations items of our non-U.S. dollar denominated subsidiaries whose functional currency is a currency other than the U.S. dollar into the functional currency and reporting currency of us (which is the U.S. dollar) for purposes of preparing the consolidated financial statements included elsewhere in this Form 10-K presented in U.S. dollars. The assets and liabilities of our non-U.S. dollar denominated subsidiaries are translated at the closing rate at the date of reporting and statement of operations items are translated at the average rate for the period. All resulting exchange differences are recognized in a separate component of equity, "Foreign currency translation, net of tax," and are recorded in "Other comprehensive income (loss), net of tax." These foreign currency translation differences may have significant negative or positive impacts. Our foreign currency translation risk mainly relates to our operations in Canada and Japan. In addition, foreign currency transaction risk arises when we or our subsidiaries enter into transactions where the settlement occurs in a currency other than the functional currency of us or our subsidiary. Exchange differences (gains and losses) arising on the settlement of monetary items or on translation of monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognized the consolidated statement of operations in the period in which they arise. In order to reduce significant foreign currency transaction risk from our operating and investing activity, we may use foreign currency forward and foreign currency option contracts to hedge forecasted cash inflows and outflows. Furthermore, most non-U.S. dollar denominated debts are held by non-U.S. dollar denominated subsidiaries in the same functional currency of those subsidiary operations.

Impairment in the carrying value of long-lived assets and goodwill could negatively affect our operating results and reduce our earnings.

We have a significant amount of long-lived assets and goodwill on our consolidated balance sheets. Under generally accepted accounting principles, we periodically evaluate long-lived assets for potential impairment whenever events or changes in circumstances have occurred that indicate that impairment may exist, or the carrying amount of the long-lived asset may not be recoverable. An impairment loss is recognized if the carrying amount of a long-lived asset is not recoverable based on its estimated future discounted cash flows. Goodwill must be evaluated for impairment annually or more frequently if events indicate it is warranted. If the carrying value of an asset exceeds current fair value, the goodwill may be considered impaired and may be required to be reduced to fair value by a non-cash charge to earnings. Events and conditions that could result in impairment in the value of our long-lived assets and goodwill include cash flow or operating losses at a project, other negative events or long-term outlook for a project, a more-likely-than-not expectation of selling or disposing of a project, cost factors that have negative effect on earnings and cash flows at a project, changes in business conditions or strategy, as well as (particularly for goodwill) significantly deteriorating industry, market, and general economic conditions. Impairment in the carrying value of long-lived assets and goodwill could negatively affect our operating results and reduce our earnings. For example, during 2018, upon entering an agreement to sell the El Arrayán project in Chile, we classified the related assets and liabilities as held for sale and recorded an impairment loss of \$7 million.

Our cross-border operations require us to comply with anti-corruption laws and regulations of the U.S. government and various non-U.S. jurisdictions.

Doing business in multiple countries requires us and our subsidiaries to comply with the laws and regulations of the U.S. government and various non-U.S. jurisdictions. Our failure to comply with these rules and regulations may expose us to liabilities. These laws and regulations may apply to our companies, individual directors, officers, employees and agents and may restrict our operations, trade practices, investment decisions and partnering activities. In particular, our non-U.S. operations are subject to U.S. and foreign anti-corruption laws and regulations, such as the Foreign Corrupt Practices Act of 1977 (FCPA). The FCPA prohibits U.S. companies and

their officers, directors, employees and agents acting on their behalf from corruptly offering, promising, authorizing or providing anything of value to foreign officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. The FCPA also requires companies to make and keep books, records and accounts that accurately and fairly reflect transactions and dispositions of assets and to maintain a system of adequate internal accounting controls. As part of our business, we deal with state-owned business enterprises, the employees and representatives of which may be considered foreign officials for purposes of the FCPA. As a result, business dealings between our employees or our agents and any such foreign official could expose our company to the risk of violating anti-corruption laws even if such business practices may be customary or are not otherwise prohibited between our company and a private third-party. Violations of these legal requirements are punishable by criminal fines and imprisonment, civil penalties, disgorgement of profits, injunctions, debarment from government contracts as well as other remedial measures. We have established policies and procedures designed to assist us and our personnel in complying with applicable U.S. and non-U.S. laws and regulations; however, we cannot assure stockholders that these policies and procedures will completely eliminate the risk of a violation of these legal requirements, and any such violation (inadvertent or otherwise) could have a material adverse effect on our business prospects, financial condition and results of operations.

We own, and in the future may acquire, certain projects in joint ventures, and our joint venture partners' interests may conflict with our and our stockholders' interests.

We own certain projects in joint ventures (including South Kent, Armow and Grand, in which we have a 50%, 50% and 45% interest, respectively), and, in the future, we may acquire or invest in additional projects with a joint venture partner. In addition, our strategic joint partnership arrangements with PSP Investments include arrangements in which PSP Investments may co-invest in ROFO projects based on a process that is controlled by us, and we can elect the percentage interest to offer to PSP Investments in each project, which is expected to range from 30% to 49.9%. Under such arrangements, PSP Investments has to date co-invested (and we have joint venture arrangements with them) in each of Meikle and Mont Sainte-Marguerite in which we have a 51% limited partner interest and PSP Investments holds the remaining limited partner interests, as well as in each of Panhandle 2 and Stillwater in which we have 51% of the Class B interests and PSP Investments holds the remaining Class B interests. Joint ventures inherently involve a lesser degree of control over business operations, which could result in an increase in the financial, legal, operational or compliance risks associated with a project, including, but not limited to, variances in accounting and internal control requirements. To the extent we do not have a controlling interest in a project, or to the extent we have granted our joint venture partner veto rights, our joint venture partners could take actions that decrease the value of our investment and lower our overall return. In addition, conflicts of interest may arise in the future between our company and our stockholders, on the one hand, and our joint venture partners, on the other hand, where our joint venture partners' business interests are inconsistent with our and our stockholders' interests. Further, disagreements or disputes between us and our joint venture partners may arise which could result in litigation, increase our expenses and potentially limit the time and effort our officers and directors are able to devote to our business, all of which could have a material adverse effect on our business prospects, financial condition and results of operations. An inability of Pattern Development to obtain the requisite financing to develop and construct projects could have a material adverse effect on our ability to grow our business.

Power project development is a capital intensive, high-risk business that relies heavily on and, therefore, is subject to the availability of debt and equity financing sources to fund projected construction and other projected capital expenditures. As a result, in order to successfully develop a power project, Pattern Development (in which we hold an approximate 29% interest) from which we may seek to acquire power projects, must obtain at-risk funds sufficient to complete the development phase of their projects. Any significant disruption in the credit and capital markets, or a significant increase in interest rates, could make it difficult for Pattern Development to successfully develop attractive projects. If Pattern Development, or other development companies from which we seek to acquire projects, are unable to raise funds when needed, the ability to grow our project portfolio may be limited, which could have a material adverse effect on our ability to implement our growth strategy and, ultimately, our business prospects, financial

Steps we take in response to developments in the market, such as the potential inclusion of energy storage and battery systems in our projects, expose us to risks.

condition and results of operations.

Steps we may need to take in response to developments in the market expose us to risks. For example, in order to remain competitive as an IPP in the market, we may need to leverage utilization of energy storage and batteries in our projects. The applications for energy storage and battery systems include the provision of backup power, grid independence, peak demand reduction, demand response, reducing intermittency of renewable generation and wholesale electric market services. However, project scale battery systems and technologies are at a nascent stage, and any system deployed may not deliver the performance expected and our returns, as a result, may be below our expectations. In addition, energy storage products and batteries are rapidly advancing technologies, and future advances in these products may render any such systems and technologies we may install or retrofit into our projects inefficient or obsolete. In addition, energy storage and battery systems are complex, and defects or a failure of such systems to perform as expected may pose risks related to health,

safety, and the environment. Any of such risks, or other risks that may be posed by the need to respond to developments in the market to remain competitive, could materially and adversely affect our business prospects, financial condition, and results of operations and liquidity.

Security breaches, including cybersecurity breaches, and other disruptions could compromise our business operations and critical and proprietary information and expose us to liability, which could adversely affect our business prospects, financial condition and reputation.

In the ordinary course of our business, we store sensitive data and proprietary information regarding our business, employees, shareholders, offtakers, service providers, business partners and other individuals in our data center and on our network. Additionally, we use and are dependent upon information technology systems that utilize sophisticated operational systems and network infrastructure to run our projects. Through our 24/7 operations control center, we can for our projects in the U.S. and Canada, among other things, monitor and control each wind turbine, monitor regional and local climate, track real time market prices and, for some of our projects, monitor certain environmental activities. The confidentiality, integrity and availability of information technology systems is critical to our operations. Despite security measures we have employed, including certain measures implemented pursuant to mandatory NERC Critical Infrastructure Protection standards, our infrastructure may be increasingly subject to attacks by hackers or terrorists as a result of the rise in the sophistication and volume of cyberattacks, Also, our information and information technology systems may be breached due to commodity malware, human error, malfeasance or other malfunctions and disruptions. Any such attack or breach could: (i) compromise our turbines, wind farms and solar facilities thereby adversely affecting generation and transmission to the grid; (ii) adversely affect our operations; (iii) corrupt data; or (iv) result in unauthorized access to the information stored on our networks, including, company proprietary information and employee data causing the information to be publicly disclosed, lost or stolen or result in incidents that could result in harmful effects on the environment and human health, including loss of life. Any such attack, breach, access, disclosure or other loss of information could result in lost revenue, the inability to conduct critical business functions, legal claims or proceedings, fines and regulatory penalties, increased regulation, increased protection costs for enhanced cybersecurity systems or personnel, damage to our reputation and/or the rendering of our disclosure controls and procedures ineffective, all of which could adversely affect our business prospects, financial condition and reputation.

Risks Related to Future Growth and Acquisitions

The growth of our business depends in part on locating and acquiring interests in additional attractive independent power and transmission projects.

Our business strategy includes acquiring power projects that are either operational, construction-ready, or (in limited circumstances outside of activities conducted by Pattern Development) under development. We intend to pursue opportunities to acquire projects from third-party owners where we may submit bids from time to time, and from each of the Pattern Development Companies pursuant to our respective Purchase Rights.

Various factors could affect the availability of attractive projects to grow our business, including: competing bids for a project, including a project subject to our respective Purchase Rights, from other owners, including companies that may have substantially greater capital and other resources than we do; fewer acquisition opportunities than we expect from both third-parties and the Pattern Development Companies, which could result from, among other things, available projects having less desirable economic returns or higher risk profiles than we believe suitable for our business plan and investment strategy. After, in part, consideration of such factors, in 2018 we had waived our Purchase Rights with respect to various projects at each of the Pattern Development Companies;

failure by Pattern Development to complete the development of (i) an Identified ROFO Project, which could result from, among other things, permitting challenges, failure to procure the requisite financing, equipment or interconnection, local opposition to the project which may entail litigation, or an inability to satisfy the conditions to effectiveness of project agreements such as PPAs and (ii) any of the other projects in its respective development pipeline, in a timely manner, or at all, in either case, which could limit our acquisition opportunities under our respective Purchase Rights and/or the value of our investment in Pattern Development; and our failure to exercise our respective Purchase Rights or acquire assets from Pattern Energy Group LP or Pattern Development.

Any of these factors could prevent us from executing our growth strategy or otherwise have a material adverse effect on our business prospects, financial condition and results of operations. See also "- We have invested in Pattern Development which exposes us directly to project development risks."

Additionally, even if we consummate acquisitions that we believe will be accretive to cash available for distribution per share, those acquisitions may in fact result in a decrease in cash available for distribution per Class A share as a result of incorrect assumptions in our evaluation of such acquisitions, unforeseen consequences or other external events beyond our control. Furthermore, if we consummate any future acquisitions, our capitalization and results of operations may change significantly, and stockholders will not generally have the opportunity to evaluate the economic, financial and other relevant information that we consider in determining the application of capital and other resources.

Capital market conditions can have an effect on both our timing and ability to consummate future acquisitions. We must also potentially anticipate obtaining funds from equity or debt financings to complete construction or pay capital costs of an acquired project which exposes us to financing risks.

Financing acquisitions of projects requires capital which has in the past been raised partially or wholly through the issuance of additional Class A shares, notes or other equity linked or debt instruments. However, no assurances can be given that we will be able to access the capital markets on commercially reasonable terms when acquisition opportunities arise. Our ability to access the equity and debt capital markets is dependent on, among other factors, the overall state of the capital markets and investor appetite for investment in clean energy projects in general and our Class A shares and our debt securities in particular. Volatility in the market price of our Class A shares or our credit rating may prevent or limit our ability to utilize our equity or debt securities as a source of capital to help fund acquisition opportunities.

During 2018, the prices for our Class A shares traded on the Nasdaq Global Select Market ranged from a high of \$26.56 to a low of \$18.83. On February 22, 2019, the last reported sale price of our Class A shares on such market was \$21.13 and we have a BB-/Ba3 credit rating from Standard & Poor's and Moody's, respectively. In addition, we evaluate the loan market and private investment market as potential sources of capital to finance acquisitions. Similar to the capital markets, no assurances can be given that we will be able to access such markets on commercially reasonable terms when acquisition opportunities arise to obtain financing, or at all. An inability to obtain financing on commercially reasonable terms could significantly limit our timing and ability to consummate future acquisitions, and to effectuate our growth strategy. In addition, the issuance of additional Class A shares in connection with acquisitions, particularly if consummated at depressed price levels or consummated at price levels that declined significantly between the signing and closing of an acquisition, could cause significant shareholder dilution, expose us to risks of being unable to consummate an acquisition we had agreed to, and reduce the cash distribution per share if the acquisitions are not sufficiently accretive.

We must also potentially anticipate obtaining funds from equity or debt financings, including tax equity transactions, or from other sources in order to fund any required construction and other capital costs of the acquired projects. The availability of tax equity financing may be affected by external events which we do not control, such as changes in tax law.

In the event we determine it is not economical to utilize, or we are unable to utilize our equity or debt securities as a source of capital to fund acquisition opportunities, or as a source of capital to complete any construction outstanding or pay capital costs of acquired projects, we may need to consider utilizing other sources of capital, such as cash on hand, borrowings under our existing credit facilities, or arranging additional credit facilities, none of which may be available or may not be available at attractive terms. Our inability to effectively consummate future acquisitions, or to finance construction or other capital costs cost-effectively, could have a material adverse effect on our ability to grow our business.

Acquisition and disposal of power projects involves numerous risks.

Our strategy includes acquiring power projects. The acquisition of power projects involves numerous risks, many of which may not be able to be discovered through our due diligence process, including exposure to previously existing liabilities and unanticipated costs associated with the pre-acquisition period; difficulty in integrating the acquired projects into our existing business; operational deficiencies or problematic wind or solar characteristics; and, if the projects are in new markets, the risks of entering markets where we have limited experience. A failure to achieve the financial returns we expect when we acquire power projects could have a material adverse effect on our ability to implement our growth strategy and, ultimately, our business prospects, financial condition and results of operations.

Furthermore, from time to time, we may believe it in the best interests of ourselves and our stockholders to dispose of power projects, and during 2018 we disposed of interests in each of the El Arrayán and K2 project. Reasons for a disposal may include limited opportunities in a market, changes in business environment or law which reduces the attractiveness of a market, excessive competition in the market, changes in business strategy, or a belief we can utilize funds realized from such a disposal in a more productive manner or generate a higher return on investment. The disposal of power projects involves numerous risks, many of which are outside of our control, including the ability to locate an attractive buyer of a power project, the management attention required to devote to the disposal, the ability to obtain a favorable price for a power project, the length of time required to complete the disposal process, and the potential difficulty of re-entering a market in the future after exiting a market. In addition, in connection with the disposal of projects we may agree to indemnities

or other provisions which expose us to potential ongoing liability after the disposal which exposes us to risks. No assurances can be given that we would be successful in consummating any disposal in a timely manner (or at all), that we would achieve an attractive (or positive) financial return from the disposal, or that we would be successful in re-deploying funds generated from any disposal in a manner that would generate higher returns.

Our ability to grow our cash available for distribution is substantially dependent on our ability to make acquisitions on economically favorable terms.

Our goal of growing our cash available for distribution and increasing dividends to our Class A stockholders is substantially dependent on our ability to make and finance acquisitions on terms that result in an increase in cash available for distribution per Class A share. To grow our cash available for distribution per Class A share through acquisitions, we must be able to acquire new generation assets, such as the Identified ROFO Projects, on economically favorable terms. If we are unable to make accretive acquisitions from the Pattern Development Companies or third parties because we are unable to identify attractive acquisition opportunities, negotiate acceptable purchase contracts, obtain financing on economically acceptable terms or are outbid by competitors, we may not be able to realize our targeted growth in cash available for distribution per Class A share.

The energy industry in the markets in which we operate, as well as the markets we are looking to expand into, benefit from governmental support that is subject to change. Regulatory uncertainty in the clean energy sector, including with respect to environmental and tax policies, may have adverse impacts on the renewable energy industry and our business.

The energy industry (including both fossil fuel and renewable energy sources) in the markets in which we operate and are looking to expand into benefits in general from various forms of governmental support. Renewable energy sources in Canada benefit from federal and provincial incentives, such as RPS programs, accelerated cost recovery deductions, the availability of off-take contracts through RFP and standard offer programs including the Hydro-Quebec call for tenders, the Ontario feed-in tariff and large renewable procurement programs (which operated until late 2018), and other commercially oriented incentives. Renewable energy sources in the United States have benefited from various federal and state governmental incentives, such as PTCs, ITCs, ITC cash grants, loan guarantees, RPS programs and accelerated tax depreciation. PTCs and ITCs for wind and solar energy on the federal level were extended in December 2015, subject to phase down for wind projects that begin construction by 2019 and solar projects that begin construction by 2021. In 2012, Japan introduced a feed-in-tariff program that offered fixed term, fixed price contracts of up to 20 years to renewable power projects. The Mexican congress has established a mandate that at least 35% of its energy consumption be supplied by clean sources by 2024.

While such developments extending various forms of governmental support provide general benefits to the wind and solar power industries in which we operate, to the extent that these governmental incentive programs may be amended or changed in the future, particularly if amendments or changes are unexpected or unfavorable and after we have developed long-term business plans and strategies based upon them, it could adversely affect the price of electricity sold to power purchasers generated by developed or planned renewable energy projects, decrease demand for renewable energy, or reduce the number of projects available to us for acquisition, any of which could have a material adverse effect on our ability to implement our growth strategy and, ultimately, our business prospects, financial condition and results of operations. For example, the U.S. Environmental Protection Agency (EPA) under the current U.S. administration has taken measures to repeal the Clean Power Plan, a regulation issued by the EPA under the prior U.S. administration aimed at reducing use of existing coal fired electricity generation facilities and increasing renewable generation in order to reduce greenhouse gas emissions. The current U.S. administration has also proposed and taken actions to implement other policies that have created regulatory uncertainty in the renewable energy sector, including the sectors in which we operate, and may lead to a reduction or removal of various renewable energy programs and initiatives designed to curtail climate change. Such a reduction or removal of incentives may diminish the markets in which we operate. As a part of comprehensive income tax reform in 2017, the corporate tax rate was reduced, and while such reductions have certain positive impacts on our financial results as applied to our own corporate taxes, a reduction in the corporate tax rate could also have adverse consequences, such as diminishing the capacity of potential investors in our projects to benefit from incentives and reduce the value of accelerated depreciation deductions. In addition, as a part of comprehensive tax reform in 2017, there were proposed amendments in Congress that would have adversely affected the value and ability to preserve benefits of PTCs and ITCs for wind

and solar energy on the federal level. While these amendments were in large part not adopted, no assurances can be given that there will not be future efforts to make amendments that could adversely affect the value and benefits of the PTC. The current U.S. administration has also made public statements and taken actions regarding overturning or modifying policies of or regulations enacted by the prior administration that placed limitations on coal and gas electric generation, mining and/or exploration. Efforts to overturn federal and state laws, regulations or policies that are supportive of renewable energy generation or that remove costs or other limitations on other types of generation that compete with renewable energy projects could materially and adversely affect our business prospects, financial condition or results of operations.

Wind power procurement in Canada is a provincial matter, with relatively irregular, infrequent and competitive procurement windows.

Each province in Canada has its own regulatory framework and renewable energy policy, with few material federal policies to drive the growth of renewable energy. Renewable energy developers must anticipate the future policy direction in each of the provinces, and secure viable projects before they can bid to procure a PPA through highly competitive PPA auctions. Most markets are relatively small. Renewable energy procurement may change dramatically as a result of changes in the provincial government or political climate. For example, the current administration in Ontario has made pledges to revamp the province's energy policies (such as the cap-and-trade program) and taken steps to cancel and wind down certain contracts for renewable power projects that are in the pre-construction phase. Further, the Ontario government enacted legislation in late 2018 to repeal the Green Energy Act which was a significant part of the framework for renewables development in the province since its enactment in 2009. These measures were taken in connection with specific pledges made by the incoming government during the election process.

We face competition primarily from infrastructure funds and IPPs focused on renewable energy generation. We believe our primary competitors are infrastructure funds and some IPPs, including other wind companies, focused on renewable energy generation. We compete with these companies to acquire well-developed projects with projected stable cash flows that can be built in a cost-effective manner. We also compete with other renewable energy developers and operators for the limited pool of personnel with requisite industry knowledge and experience. Furthermore, in past years, there have been times of increased demand for wind turbines, solar panels and their related components, causing such suppliers to have difficulty meeting the demand. If these conditions return in the future, such suppliers may give priority to other market participants, including our competitors, who may have resources greater than ours.

We compete with other renewable energy companies (and power companies in general) for the lowest cost financing, which provides the highest returns for our projects. Once we have acquired a construction project and put it into operation, we may compete on price if we sell electricity into power markets at wholesale market prices. Depending on the regulatory framework and market dynamics of a region, we may also compete with other wind power companies and other renewable energy generators, when our projects bid on or negotiate for long-term power sale agreements or sell electricity or RECs into the spot-market.

We have no control over where our competitors may erect wind power projects. Our competitors may erect wind power projects adjacent to our wind projects that may cause upwind array losses to occur at our wind projects. Upwind array losses reflect the diminished wind resource available at a project resulting from interference with available wind caused by adjacent wind turbines. An adjacent wind power project that causes upwind array losses could have a material adverse effect on our revenues and results of operations.

Any change in power consumption levels could have a material adverse effect on our business prospects, financial condition and results of operations.

The amount of wind and solar power consumed by the electric utility industry is affected primarily by the overall demand for electricity, environmental and other governmental regulations and the price and availability of fuels such as nuclear, coal, natural gas and oil as well as other sources of renewable energy. Slow growth in overall demand for electricity or a long-term reduction in the demand for renewable energy could have a material adverse effect on our plan to grow our business and could, in turn, have a material adverse effect on our business prospects, financial condition and results of operations. A decline in prices for fossil fuels could cause demand for wind and/or solar power to decrease and adversely affect the demand for our products. For example, low natural gas prices have led, in some instances, to increased natural gas consumption by electricity-generating utilities in lieu of other power sources. To the extent renewable energy becomes less cost-competitive on an overall basis as a result of a lack of governmental incentives, cheaper alternatives or otherwise, demand for wind and solar power could decrease.

Some states and provinces with renewable energy targets have met their targets, or will meet them in the near future, which could cause demand for new wind and solar power capacity to decrease.

State RPS programs in the United States represent roughly half of all growth in non-hydro renewable electricity generation since 2000. Enactment of new RPS policies has waned but states have continued to hone existing policies. More than half of all RPS states have raised their overall RPS targets or carve-outs since initial RPS adoption. In

2018, California, Connecticut, Massachusetts, and New Jersey increased their RPS targets, while New York established an offshore wind procurement target. It has been estimated that eight states will reach their final RPS target year within the next few years, seven states in 2025 to 2026, and ten states have targets extending to 2030 or beyond. Many interim targets for states or utilities are well ahead of schedule. Many bills have also been proposed to repeal, reduce, or freeze RPS programs, though only two have been enacted.

While some Canadian provinces have increased their renewable energy targets - Saskatchewan 50% by 2030 and Alberta 30% by 2030 - others have reduced their demand for renewables, including Ontario, which has halted its Large Renewable Procurement Process. Additionally, in Canada, hydro power dominates when it comes to meeting renewable energy targets.

As a result of achieving targets, and if such U.S. states and Canadian provinces do not increase non-hydro renewable energy targets in the future, demand for additional wind and solar power generating capacity could decrease, which could have a material adverse effect on our business prospects, financial condition, and results of operations. Since initially announcing Japan's 2030 Energy Targets in June 2015, Japan has made significant progress towards meeting the renewable energy target of 22% to 24%. While the target for nuclear power remains unmet, and the ability to ever reach it is questionable, solar power has already exceeded its goal, and if Japan were to limit future renewable energy growth to the current numbers, the push for continued growth could be limited which could have an adverse effect on our business prospects.

In spite of our Pattern Energy Group LP Purchase Rights and Pattern Development Purchase Rights, it is possible that Pattern Energy Group LP and/or Pattern Development, respectively, might be sold to third parties. In addition, each of our respective Project Purchase Rights, Pattern Energy Group LP Purchase Rights and Pattern Development Purchase Rights may expire, and the Second Amended and Restated Non-Competition Agreement with Pattern Energy Group LP and Pattern Development might terminate.

To the extent we do not exercise our Pattern Energy Group LP Purchase Rights and/or Pattern Development Purchase Rights (or upon their expiration), Pattern Energy Group LP and/or Pattern Development, respectively, or substantially all of its respective assets may be sold to third parties, including our competitors. Even if we are interested in exercising the Pattern Energy Group LP Purchase Rights and/or Pattern Development Purchase Rights, Pattern Energy Group LP and/or Pattern Development may seek a purchaser at an inopportune time for us, or we may not be able to reach an agreement on pricing or other terms. If we are unable to reach an agreement with Pattern Energy Group LP, Pattern Development, or its respective equity owners or if we decline to make an offer, Pattern Energy Group LP, Pattern Development, or its respective equity owners may seek alternative buyers, which could have a material adverse effect on our ability to implement our growth strategy and, ultimately, our business prospects, financial condition and results of operations.

In addition, our Project Purchase Right with Pattern Energy Group LP and our Pattern Energy Group LP Purchase Rights terminate upon the third occasion on which we decline to exercise our respective Project Purchase Right with respect to an operational or construction-ready project for which we did not make a final offer for such projects. Our Project Purchase Right with Pattern Development and our Pattern Development Purchase Rights terminate upon winding-up of Pattern Development. Following termination of our respective Project Purchase Right, and our Pattern Energy Group LP Purchase Rights and Pattern Development Purchase Rights, Pattern Energy Group LP or Pattern Development, as the case may be, will be under no obligation to offer any of its projects to us, which could have a material adverse effect on our ability to implement our growth strategy and ultimately on our business prospects, financial condition and results of operations.

Once our respective Purchase Rights with Pattern Energy Group LP and/or Pattern Development terminate, the Second Amended and Restated Non-Competition Agreement with respect to Pattern Energy Group LP or Pattern Development, as the case may be, will also terminate. In addition, we also have the right to terminate the Second Amended and Restated Non-Competition Agreement upon the earlier of wind-up of Pattern Development or the valid rejection by Pattern Development of three or more first rights project offers representing a cumulative net capacity of at least 600 MWs. Under the Second Amended and Restated Non-Competition Agreement, (among other things) Pattern Development is granted an exclusive right, with certain exceptions, to pursue all power generation, storage or transmission development projects in the U.S., Canada and Mexico that have not completed construction, but this does not restrict us from acquiring any company or business that is principally engaged in the business of owning and operating renewable energy facilities. In addition, at any time that Tokyo, Japan-based GPI is majority owned by either us, Pattern Energy Group LP or Pattern Development, such majority owner (which is currently Pattern Development) is granted exclusive development rights, with certain exceptions, over power generation, storage or transmission projects in Japan.

We may decide to further expand our acquisitions of non-wind power projects which may present unforeseen challenges.

With the consummation of the acquisition of the 35-mile 345 kV Western Interconnect transmission line as a part of the acquisition of the Broadview projects in April 2017, and the consummation of the acquisitions of the Kanagi Solar and Futtsu Solar projects (representing in aggregate 39 MW of owned-capacity in solar) in March 2018, we have expanded our operations into other types of projects besides wind power. In the future, we may further expand our acquisitions of non-wind power projects, including additional acquisitions of transmission, solar, or other types of power projects. There can be no assurance that we will be able to identify other attractive non-wind acquisition opportunities or acquire such projects at a price and on terms that are attractive or that, once acquired, such projects will operate profitably. Additionally, these acquisitions could expose us further to increased operating costs, unforeseen liabilities or risks, and regulatory and environmental concerns associated with expanding further into new sectors of the power industry, including requiring

a disproportionate amount of our management's attention and resources, which could have an adverse impact on our business. A failure to successfully integrate such acquisitions into our existing project portfolio as a result of unforeseen operational difficulties or otherwise, could have a material adverse effect on our business prospects, financial condition and results of operations.

We are subject to risks associated with litigation or administrative proceedings that could materially impact our operations, including proceedings in the future related to power projects we subsequently acquire.

We are subject to risks and costs, including potential negative publicity, associated with lawsuits, in particular, with respect to environmental claims, claims contesting the construction or operation of our projects, or shareholder suits. See Item 3 "Legal Proceedings." The result of, and costs associated with, defending any such lawsuit, regardless of the merits and eventual outcome, may be material and could have a material adverse effect on our operations. In the future, we may be involved in legal proceedings, disputes, administrative proceedings, claims and other litigation that arise in the ordinary course of business related to a power project that we subsequently acquire. For example, individuals and interest groups may sue to challenge the issuance of a permit for a power project or seek to enjoin construction or operation of a power project. We may also become subject to claims from individuals who live in the proximity of our power projects based on alleged negative health effects, such as acoustics caused by wind turbines or alleged contamination of groundwater, or claims of nuisance caused by a power project as a result of alleged unsightliness or potential decrease in property values. In addition, we have been and may subsequently become subject to legal proceedings or claims contesting the construction or operation of our power projects. In addition, indigenous communities in the United States and Canada, including Native Americans and First Nations, are becoming more involved in the development of wind power projects and have certain treaty rights that can negatively affect the viability of power projects.

Legal proceedings or disputes could delay our ability to complete construction of a power project in a timely manner, or at all, or materially increase the costs associated with commencing or continuing commercial operations at a power project. Settlement of claims and unfavorable outcomes or developments relating to these proceedings or disputes, such as judgments for monetary damages, injunctions or denial or revocation of permits, could have a material adverse effect on our ability to implement our growth strategy and, ultimately, our business prospects, financial condition and results of operations.

Risks Related to Our Financial Activities

Our substantial amount of indebtedness may adversely affect our ability to operate our business and impair our ability to pay dividends.

Our consolidated indebtedness not including financing costs as of December 31, 2018 was approximately \$2.3 billion. Despite our current consolidated debt levels, we or our subsidiaries may still incur substantially more debt or take other actions which would intensify the risks discussed below.

Our substantial indebtedness could have important consequences, including, for example:

failure to comply with the covenants in the agreements governing these obligations could result in an event of default under those agreements, or, under certain circumstances, cross-default to other debt instruments, which could be difficult to cure, or result in our bankruptcy;

in the event a project is unable to meet its debt service obligations through its own project cash flows, excess cash flow from other projects may be required to help service such obligations, thereby reducing funds available to pay dividends:

in the event a project is unable to meet its debt service obligations, it may result in a foreclosure on the project collateral and loss of the project;

our limited financial flexibility could reduce our ability to plan for and react to unexpected opportunities; our substantial debt service obligations make us vulnerable to adverse changes in general economic, credit and capital markets, industry and competitive conditions and adverse changes in government regulation, and place us at a disadvantage compared with competitors with less debt; and

the need to repay or otherwise refinance maturing indebtedness which we may not be able to do on favorable terms or at all. For example, we have issued \$225 million of 4.0% convertible senior notes which mature on July 15, 2020 and we have issued \$350 million of 5.875% unsecured senior notes which mature on February 1, 2024.

Any of these consequences could have a material adverse effect on our business prospects, financial condition and results of operations. If we do not comply with our obligations under our debt instruments, we may be required to refinance all or part of our existing debt, borrow additional amounts or sell securities, which we may not be able to do on favorable terms or at all. In addition, increases in interest rates and changes in debt covenants may reduce the amounts that we can borrow, reduce our cash flows and increase the equity investment we may be required to make to complete any construction of our projects. These increases could cause some of our projects to become

economically unattractive. If we are unable to raise additional capital or generate sufficient operating cash flow to repay our indebtedness, we could be in default under our lending agreements and could be required to delay construction of our projects, forgo acquisition opportunities for additional projects, reduce overhead costs, reduce the scope of our projects or abandon or sell some or all of our projects, all of which could have a material adverse effect on our business prospects, financial condition and results of operations.

Our indebtedness may limit the amount of cash flow available to invest in the ongoing needs of our business which could have a material adverse effect on business prospects, financial condition and results of operations.

Subject to the limits contained in our revolving credit facility, we may incur substantial additional debt from time to time to finance working capital, capital expenditures, investments or acquisitions, or for other purposes. If we do so, the risks related to our level of indebtedness could intensify. Specifically, a high level of indebtedness could have important consequences due to the adverse ways in which it affects us, including the following:

requiring us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby reducing the availability of our cash flow to fund working capital, capital expenditures, dividend payments, development activity, acquisitions and other general corporate purposes;

increasing our vulnerability to adverse general economic or industry conditions;

dimiting our flexibility in planning for, or reacting to, changes in our business or the industries in which we operate; making us more vulnerable to increases in interest rates, as borrowings under our revolving credit facility are at variable rates;

4 imiting our ability to obtain additional financing in the future for working capital or other purposes; and placing us at a competitive disadvantage compared to our competitors that have less indebtedness.

Our ability to comply with restrictions and covenants under the terms of our indebtedness may be affected by events beyond our control, including prevailing economic, financial and industry conditions. As a result, there can be no assurance that we will be able to comply with these restrictions and covenants, and any such default under our debt agreements could have a material adverse effect on our business by, among other things, limiting our ability to take advantage of financing, merger and acquisition or other corporate opportunities.

Despite our current consolidated debt levels, we and our subsidiaries may be able to incur substantial additional debt in the future, subject to the restrictions contained in our revolving credit facility and our future debt instruments, some of which may be secured debt. Although our revolving credit facility contains restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions and could be amended or waived, and the indebtedness incurred in compliance with these restrictions could be substantial and may also be secured. Accordingly, we may, in compliance with these restrictions, incur additional debt, secure existing or future debt, recapitalize our debt or take a number of other actions that are not limited by the terms of our existing indebtedness and that could have the effect of intensifying the risks discussed above.

We may not have the ability to raise the funds necessary to make payments in cash which may be required under the terms of the notes we have issued upon conversion settlement, repayment at maturity, or upon exercise of a repurchase obligation, and our debt agreements may limit our ability to pay cash upon conversion, repurchase or redemption of these notes.

Holders of the convertible notes we issued in July 2015 have the right to require us to repurchase all or a portion of their convertible notes upon the occurrence of a fundamental change at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. In addition, upon conversion of the convertible notes, unless we elect to deliver solely our Class A shares to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the convertible notes being converted. In addition, holders of the senior notes we issued in January 2017 may have the right to require us to repurchase all or a portion of their notes upon a change of control triggering event at a repurchase price equal to 101% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of notes surrendered therefor, pay cash at their maturity, or (with respect to convertible notes) pay cash upon conversion settlement. In addition, our ability to repurchase the notes or to pay cash upon conversions of the convertible notes may be limited by law, regulatory authority or agreements governing our indebtedness. Our failure to repurchase notes at a time when the repurchase is required by the indenture or (with respect to the convertible

notes) to pay any cash payable on future conversions of the convertible notes pursuant to the indenture would constitute a default under the indenture governing the issuance of the respective notes. A fundamental change, change of control triggering event, or a default under the indenture could also lead to a default under agreements governing our or our subsidiaries'

indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the notes or make cash payments upon redemptions thereof.

The conditional conversion feature of the convertible notes we have issued, if triggered, may adversely affect our financial condition and operating results.

The convertible notes we issued in July 2015 have a conditional conversion feature. In the event the conditional conversion feature of the convertible notes is triggered, holders of convertible notes will be entitled to convert such notes at any time during specified periods at their option. If one or more holders elect to convert their convertible notes, unless we elect to satisfy our conversion obligation by delivering solely our Class A shares (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their convertible notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the convertible notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

Provisions in the indentures governing our outstanding notes may deter or prevent a business combination that may be favorable to investors.

If a fundamental change occurs prior to the maturity date of the convertible notes we issued in July 2015 or a change of control triggering event occurs prior to the maturity date of the senior notes we issued in January 2017, holders of such notes may have the right, at their option, to require us to repurchase all or a portion of their respective notes. In addition, if a make-whole fundamental change occurs prior to the maturity date of the convertible notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its convertible notes in connection with such make-whole fundamental change. Furthermore, our indentures prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations thereunder. These and other provisions in our indentures could deter or prevent a third party from acquiring us even when the acquisition may be favorable to investors.

If our subsidiaries default on their obligations under their project-level debt, we may decide to make payments to lenders to prevent foreclosure on the collateral securing the project-level debt, which would, without such payments, cause us to lose certain of our projects.

Our subsidiaries incur various types of debt. Non-recourse debt is repayable solely from the applicable project's revenues and is secured by the project's physical assets, major contracts, cash accounts and, in many cases, our ownership interest in the project subsidiary. Limited recourse debt is debt where we have provided a limited guarantee, and recourse debt is debt where we have provided a full guarantee, which means if our subsidiaries default on these obligations, we will be liable directly to those lenders, although in the case of limited recourse debt only to the extent of our limited recourse obligations. To satisfy these obligations, we may be required to use amounts distributed by our other subsidiaries as well as other sources of available cash, reducing our cash available to execute our business plan and pay dividends to holders of our Class A shares. In addition, if our subsidiaries default on their obligations under non-recourse financing agreements, we may decide to make payments to prevent the lenders of these subsidiaries from foreclosing on the relevant collateral. Such a foreclosure would result in our losing our ownership interest in the subsidiary or in some or all of its assets. The loss of our ownership interest in one or more of our subsidiaries or some or all of their assets could have a material adverse effect on our business prospects, financial condition and results of operations and, in turn, on our cash available for distribution.

We are subject to indemnity and guarantee obligations.

We provide a variety of indemnities in the ordinary course of business to contractual counterparties and to our lenders and other financial partners. For example, the Hatchet Ridge indemnity indemnifies MetLife Capital, Limited Partnership, the owner participant, under the Hatchet Ridge Wind Lease Financing against certain tax losses. In addition, we have entered into tax equity partnership agreements in connection with seven of our projects which also provide for specific allocations in certain circumstances.

Our failure to pay any of these indemnities would enable the applicable project lenders to foreclose on the project collateral. The payments we may be obligated to make pursuant to these indemnities could have a material adverse effect on our business prospects, financial condition and results of operations and, in turn, on our cash available for

distribution.

Our variable rate indebtedness subjects us to interest rate risk, which could cause our debt service obligations to increase significantly.

Certain borrowings under our revolving credit facility and certain of our project level indebtedness are subject to variable rates of interest, primarily based on the International Continental Exchange London Interbank Offered Rate (LIBOR) or Canadian Dollar Offered Rate

(CDOR). In addition, certain of our Japanese entities have entered into a credit facility with variable rates of interest based upon the Tokyo Interbank Offered Rate (TIBOR). Borrowings with variable rates of interest, expose us to interest rate risk. Such rates tend to fluctuate based on general economic conditions, general interest rates, Federal Reserve rates and the supply of and demand for credit in the relevant interbanking market. Increases in the interest rate generally, and particularly when coupled with any significant variable rate indebtedness, could materially adversely impact our interest expenses. If interest rates were to increase, our debt service obligations on the variable rate indebtedness would increase even though the amount borrowed remained the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease. A hypothetical increase or decrease in interest rates by 1% would have a \$2 million impact on interest expense for the year ended 2018. As of December 31, 2018, \$223 million was outstanding under our revolving credit facility and the Japan credit facility. To the extent we borrow under such facilities, we are not required to enter into interest rate swaps to hedge such indebtedness. If we decide not to enter into hedges on such indebtedness, our interest expense on such indebtedness will fluctuate based on LIBOR, CDOR, TIBOR or other variable interest rates. Consequently, we may have difficulties servicing such unhedged indebtedness and funding our other fixed costs, and our available cash flow for general corporate requirements may be materially adversely affected. In the future, we may enter into interest rate swaps that involve the exchange of floating for fixed rate interest payments in order to reduce interest rate volatility. However, we may not maintain interest rate swaps with respect to all of our variable rate indebtedness, and any swaps we enter into may not fully mitigate our interest rate risk.

In addition, in July 2017, the head of the United Kingdom Financial Conduct Authority announced the desire to phase out the use of LIBOR by the end of 2021. If LIBOR ceases to exist, we may need to renegotiate our revolving credit facility and certain of our project level indebtedness that bear interest based on LIBOR or to endeavor, in the case of our revolving credit facility, with the applicable agents thereunder, to amend such facilities to substitute LIBOR with an alternative rate of interest that gives due consideration to the then-prevailing market convention for syndicated loans in the U.S., subject to notice to all lenders and the absence of objection by the "required lenders." Any change in accordance with the aforementioned procedures, or the conversion of loans to base rate or prime rate loans, could have an adverse impact on our cost of capital. Currently, there is no definitive information regarding the future utilization of LIBOR or of any particular replacement rate. As such, the potential effect of any such event on our business, financial condition, cash flows and results of operations cannot yet be determined.

Our hedging activities may not adequately manage our exposure to commodity and financial risk, which could result in significant losses or require us to use cash collateral to meet margin requirements, each of which could have a material adverse effect on our business prospects, financial condition, results of operations and liquidity, which could impair our ability to execute favorable financial hedges in the future.

Certain of the electricity we generate is sold on the open market at spot-market prices. In order to stabilize all or a portion of the revenue from such sales, we have entered, and may in the future enter, into financial swaps, day-ahead sales transaction or other hedging arrangements. We may acquire additional assets in the future with similar hedging agreements. In an effort to stabilize our revenue from electricity sales from these projects, we evaluate the electricity sale options for each of our projects, including the appropriateness of entering into a PPA, a physical sale, a financial swap, or combination of these arrangements. If we sell our electricity into an ISO market without a PPA, we may enter into a physical sale or financial swap to stabilize all or a portion of our estimated revenue stream. Under the term of our existing physical sales, we are obligated to physically deliver electricity to a common delivery point. Under these arrangements, we sell the electricity produced at our facility to the ISO at the project node and buy electricity at the common delivery point to meet the delivery obligations under the physical sale. The delivery obligations under the physical sale are for specified volumes in each hour for an overall quantity that we estimate we are highly likely to produce. Under the terms of our existing financial swaps, we are not obligated to physically deliver or purchase electricity. Instead, we receive payments for specified quantities of electricity based on a fixed price and are obligated to pay our counterparty the real time market price for the same quantities of electricity. These financial swaps cover quantities of electricity that we estimate we are highly likely to produce. Gains or losses under the physical sales and financial swaps are designed to be offset by decreases or increases in our revenues from real time market sales of electricity in liquid ISO markets. However, the actual amount of electricity we generate from operations may be materially different from our estimates for a variety of reasons, including variable wind conditions and wind turbine

availability. If a project does not generate the volume of electricity covered by the associated physical sale or financial swap contract, we could incur significant losses if electricity prices in the market rise substantially above the fixed price provided for in the physical sale or financial swap. If a project generates more electricity than is contracted in the physical sale or financial swap, the excess production will not be hedged and the related revenues will be exposed to market price fluctuations.

We would also incur financial losses as a result of adverse changes in the mark-to-market values of the financial swaps or if the counterparties to our hedging contracts fail to make payments when due. We could also experience a reduction in cash flow if we are required to post margin in the form of cash collateral to secure our delivery or payment obligations under these hedging agreements. We are not currently required to post cash collateral or issue letters of credit to backstop our obligations under our hedging arrangements after commercial operation has been achieved, but we may be required to do so in the future. If we were required to do so, our available cash or available borrowing capacity under the credit facilities under which these letters of credit are issued would be correspondingly reduced.

We enter into PPAs when we sell our electricity into markets other than deregulated ISO markets or where we believe it is otherwise advisable. Under a PPA, we contract to sell all or a fixed proportion of the electricity generated by one of our projects, sometimes bundled with RECs and capacity or other environmental attributes, to a power purchaser which is often a utility or large commercial entity. We do this to stabilize our revenues from that project. We are exposed to the risk that the power purchaser will fail to perform under a PPA, with the result that we will have to sell our electricity at the market price sometime in the future, which could be substantially lower than the price provided in the applicable PPA. In most instances, we also commit to sell minimum levels of generation on an annual basis to the power purchaser. If the project generates less than the committed minimum volumes, we may be required to buy the shortfall of electricity (or RECs and other environmental attributes) on the open market or make payments of liquidated damages or be in default under a PPA, which could result in its termination.

We sometimes seek to sell forward a portion of our RECs or other environmental attributes to fix the revenues from those attributes and hedge against future declines in prices of RECs or other environmental attributes. If our projects do not generate the amount of electricity required to earn the RECs or other environmental attributes sold forward or if for any reason the electricity we generate does not produce RECs or other environmental attributes for a particular state, we may be required to make up the shortfall of RECs or other environmental attributes through purchases on the open market or make payments of liquidated damages. Further, current market conditions may limit our ability to hedge sufficient volumes of our anticipated RECs or other environmental attributes, leaving us exposed to the risk of falling prices for RECs or other environmental attributes. Future prices for RECs or other environmental attributes are also subject to the risk that regulatory changes will adversely affect prices.

Risks Related to Ownership of our Class A Shares

We are a holding company with no operations of our own, and we depend on our power projects for cash to fund all of our operations and expenses, including to make dividend payments.

Our operations are conducted almost entirely through our power projects and our ability to generate cash to meet our debt service obligations or to pay dividends is dependent on the earnings and the receipt of funds from our project subsidiaries through distributions or intercompany loans. Our power projects' ability to generate adequate cash depends on a number of factors, including wind conditions, timely completion of any construction projects, the price of electricity, payments by key power purchasers, increased competition, foreign currency exchange rates, compliance with all applicable laws and regulations and other factors. See Item 1A "Risk Factors-Risks Related to the Business Segments in which We Operate." Our ability to declare and pay regular quarterly cash dividends is subject to our obtaining sufficient cash distributions from our project subsidiaries after the payment of operating costs, debt service and other expenses. See Item 5 "Market for Registrant's Common Equity and Related Stockholder Matters-Cash Dividend to Investors." We may lack sufficient available cash to pay dividends to holders of our Class A shares due to shortfalls attributable to a number of operational, commercial or other factors, including insufficient cash flow generation by our projects, as well as unknown liabilities, the cost associated with governmental regulation, increases in our operating or general and administrative expenses, principal and interest payments on our and our subsidiaries' outstanding debt, tax expenses, working capital requirements and anticipated cash needs.

Our cash available for distribution to holders of our Class A shares may be reduced as a result of restrictions on our subsidiaries' cash distributions to us under the terms of their indebtedness, or in the event certain specified events occurred under our tax equity arrangements that change the percentage of cash distributions to be made to the tax equity investors.

We intend to declare and pay regular quarterly cash dividends on all of our outstanding Class A shares. However, in any period, our ability to pay dividends to holders of our Class A shares depends on the performance of our subsidiaries and their ability to distribute cash to us, as well as all of the other factors discussed under Item 5 "Market for Registrant's Common Equity and Related Stockholder Matters-Cash Dividend to Investors." The ability of our subsidiaries to make distributions to us may be restricted by, among other things, the provisions of existing and future indebtedness and the provisions existing and future tax equity arrangements.

Restrictions on distributions to us by our subsidiaries under our revolving credit facility and the agreements governing their respective project-level debt could limit our ability to pay anticipated dividends to holders of our Class A shares. These agreements contain financial tests and covenants that our subsidiaries must satisfy prior to making distributions. We may agree to similar restrictions on distributions under future debt instruments we may enter into in connection

with future note or bond offerings. If any of our subsidiaries is unable to satisfy these restrictions or is otherwise in default under such agreements, it would be prohibited from making distributions to us that could, in turn, limit our ability to pay dividends to holders of our Class A shares. For example, factors such as low wind conditions and curtailment contributed to certain of our projects not satisfying financial tests required to permit distributions to us during certain quarters of 2018. The terms of our project indebtedness typically require commencement of commercial operations prior to our ability to receive cash distributions from a project. The terms of any such indebtedness also typically include cash management or similar provisions, pursuant to which revenues generated by projects subject to such indebtedness are immediately, or upon the occurrence of certain events, swept into an account for the benefit of the lenders under such debt agreements. As a result, project revenues typically only become

available to us after the funding of reserve accounts for, among other things, operations and maintenance expenses, debt service, taxes and insurance at the project level. In some instances, projects may be required to sweep cash to reserve funds intended to mitigate the results of pending litigation or other potentially adverse events. In addition, the terms of operating agreements for our wind facilities with tax equity investors, which include Panhandle 1, Panhandle 2, Post Rock, Logan's Gap, Amazon Wind, Broadview and Stillwater, generally provide for specified allocations of distributions between the tax equity investors and ourselves which change at a specified point when the tax equity investor has realized a target after tax internal rate of return. In the event this change has not occurred by a targeted date, the tax equity investor begins to receive a greater allocation of distributions until the targeted rate of return has been achieved. In addition, the operating agreements also provide for earlier increases in the percentage of distributable cash to be allocated to the tax equity investors if the project fails to achieve certain defined minimum performance levels that are likely to cause the tax equity investors to not achieve the targeted after tax return by the targeted date and for increases under certain circumstances to match allocations of taxable income that are made to mitigate a negative capital account balance for such tax equity investors. As a result, in the event our share of distributable cash from these projects is changed as a result of one of these events, our distributions from such wind facilities may be less than expected that could, in turn, limit our ability to pay dividends to holders of our Class A shares.

Some of our wind facilities with tax equity investors have experienced lower than expected production and merchant power prices resulting in each of those projects failing to pass financial tests that measure cumulative cash distributions to the members. This resulted in 2018, and could additionally result in 2019, in a change of the cash percentage allocated to the tax equity members which will continue until the shortfall is remedied. If our projects do not generate sufficient cash available for distribution, we may be required to reduce or eliminate our dividend, or fund dividends from working capital or other sources of liquidity, which may not be available, any of which could have a material adverse effect on the price of our Class A shares and on our ability to pay dividends at anticipated levels or at all.

Our ability to pay regular dividends on our Class A shares is subject to the discretion of our Board of Directors, and our cash dividend policy is subject to change.

Holders of our Class A shares have no contractual or other legal right to receive cash dividends from us on a quarterly or other basis and, while we currently intend to at least maintain our current dividend, our cash dividend policy is subject to all the risks inherent in our business and may be changed at any time.

The payment of future dividends on our Class A shares is at the discretion of our Board of Directors and depends on, among other things, our earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends, consideration of factors such as our payout ratio, and other considerations that our Board of Directors deems relevant. During 2018, 2017 and 2016, our payout ratios which is a percentage of dividends paid (on an accrual basis) compared to our cash available for distribution for such periods were 99%, 100% and 90%, respectively. Our Board of Directors has the authority to establish cash reserves for the prudent conduct of our business, and the establishment of or increase in those reserves could result in a reduction in cash available for distribution to pay dividends on our Class A shares at anticipated levels. Accordingly, we may not be able to make, or may have to reduce or eliminate, the payment of dividends on our Class A shares, which could adversely affect the market price of our Class A shares.

If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired and investors' views of us could be harmed.

U.S. securities laws require, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. We must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act.

If we identify deficiencies in our internal control over financial reporting that are deemed to be a material weakness or results in multiple material weaknesses (even if such material weakness or material weaknesses do not result in a misstatement of our financial statements), it could adversely affect investor perceptions of our company.

Furthermore, if there was a failure in the effectiveness of our internal controls over financial reporting which results in misstatements in our financial statements, it could cause us to fail to meet our reporting obligations, could cause the

market price of our shares to decline, and we could be subject to sanctions or investigations by the stock exchanges on which we list, the SEC, the Canadian Securities Administrators or other regulatory authorities, and could adversely affect our ability to access the capital markets.

We are an SEC foreign issuer under Canadian securities laws and, therefore, are exempt from certain requirements of Canadian securities laws applicable to other Canadian reporting issuers.

Although we are a reporting issuer in Canada, we are an SEC foreign issuer under Canadian securities laws and are exempt from certain Canadian securities laws relating to continuous disclosure obligations and proxy solicitation if we comply with certain reporting requirements applicable in the United States, provided that the relevant documents filed with the SEC are filed in Canada and sent to our Class A stockholders in Canada to the extent and in the manner and within the time required by applicable U.S. requirements. In some cases, the disclosure obligations applicable in the United States are different or less onerous than the comparable disclosure requirements applicable in Canada for a Canadian reporting issuer that is not exempt from Canadian disclosure obligations. Therefore, there may be less or different publicly available information about us than would be available if we were a Canadian reporting issuer that is not exempt from such Canadian disclosure obligations.

Pattern Energy Group LP's and Pattern Development's general partners and their officers and directors have fiduciary or other obligations to act in the best interests of the owners of such entities, which could result in a conflict of interest with us and our stockholders.

We are party to the Multilateral Management Services Agreement, pursuant to which each of our executive officers (including our Chief Executive Officer) is a shared executive and devotes time to each of our company, Pattern Energy Group LP, and Pattern Development as needed to conduct the respective businesses. As a result, in some instances these shared executives have fiduciary and other duties to these Pattern Development Companies. Conflicts of interest may arise in the future between our company (including our stockholders), and Pattern Energy Group LP and Pattern Development (and their respective owners and affiliates). Our directors and executive officers owe fiduciary duties to the holders of our shares. However, Pattern Energy Group LP's and Pattern Development's general partners and their officers and directors also have a fiduciary duty to act in the best interest of Pattern Energy Group LP's and Pattern Development's limited partners, respectively, which interest may differ from or conflict with that of our company and our other stockholders.

The share ownership of PSP Investments may limit other stockholders' ability to influence corporate matters, and the interests of such stockholder may differ from or conflict with the interests of other stockholders.

PSP Investments holds approximately 9.5% of the voting power of our shares. As a result, PSP Investments has significant influence over all matters that require approval by our stockholders, including the election of directors, and their voting power may limit other stockholders' ability to influence this and other corporate matters. We also have joint venture arrangements with PSP Investments pursuant to which PSP Investments has acquired interests in four of our projects (which number may increase in the future). In addition, under such joint venture arrangements, we may add a person that has been designated by PSP Investments to our Board of Directors. PSP Investments is also an indirect investor in Pattern Development. Because of these various arrangements, the interests of PSP Investments may differ from or conflict with the interests of our other stockholders.

Certain of our executive officers will continue to have an economic interest in, and all of our executive officers will continue to provide services to, Pattern Energy Group LP and Pattern Development, which could result in conflicts of interest.

All of our executive officers provide services to Pattern Energy Group LP and Pattern Development pursuant to the terms of the Multilateral Management Services Agreement between our company, Pattern Energy Group LP, and Pattern Development, and, as a result, in some instances, have fiduciary or other obligations to such Pattern Development Companies. However, neither our Chief Financial Officer, nor our Chief Investment Officer receive compensation from, or have an economic interest in, either Pattern Energy Group LP or Pattern Development. Additionally, while none of our Chief Executive Officer, Executive Vice President, Business Development, and Executive Vice President, Chief Legal Officer, receive compensation from either Pattern Energy Group LP or Pattern Development, such officers have economic interests in such Pattern Development Companies and, accordingly, the benefit to such Pattern Development Companies from a transaction between such Pattern Development Company and our company will proportionately inure to their benefit as holders of economic interests in such Pattern Development Company. Each of Pattern Energy Group LP and Pattern Development are related parties under the applicable securities laws governing related party transactions and, as a result, any material transaction between our company and Pattern Energy Group LP or Pattern Development is subject to our corporate governance guidelines, which require

prior approval of any such material transaction by the conflicts committee, which is comprised solely of independent members of our Board of Directors. Those of our executive officers who have economic interests in Pattern Energy Group LP or Pattern Development may be conflicted when advising the conflicts committee or otherwise participating in the negotiation or approval of such transactions. These executive officers have significant project- and industry-specific expertise that could prove beneficial to the conflicts committee's decision-making process and the absence of such strategic guidance could have a material adverse effect on our company's ability to evaluate any such transaction and, in turn, on our business prospects, financial condition and results of operations.

Riverstone is under no obligation to offer us an opportunity to participate in any business opportunities that it may consider from time to time, including those in the energy industry, and, as a result, Riverstone's existing and future portfolio companies may compete with us for investment or business opportunities.

Conflicts of interest could arise in the future between us, on the one hand, and Riverstone, including its portfolio companies, on the other hand, concerning among other things, potential competitive business activities or business opportunities. Riverstone is a private equity firm in the business of making investments in entities primarily in the energy industry. As a result, Riverstone's existing and future portfolio companies (other than Pattern Energy Group LP and Pattern Development, which are subject to the Second Amended and Restated Non-Competition Agreement) may compete with us for investment or business opportunities. These conflicts of interest may not be resolved in our favor. Subject to the terms of the Second Amended and Restated Non-Competition Agreement with, and our respective Purchase Rights granted to us by, each of Pattern Energy Group LP and Pattern Development, we have expressly renounced any interest or expectancy in, or in being offered an opportunity to participate in, any business opportunity that may be from time to time presented to Riverstone or any of its officers, directors, agents, stockholders, members or partners or business opportunities that such parties participate in or desire to participate in, even if the opportunity is one that we might reasonably have pursued or had the ability or desire to pursue if granted the opportunity to do so, and no such person shall be liable to us for breach of any fiduciary or other duty, as a director or officer or controlling stockholder or otherwise, by reason of the fact that such person pursues or acquires any such business opportunity, directs any such business opportunity to another person or fails to present any such business opportunity, or information regarding any such business opportunity, to us unless, in the case of any such person who is our director or officer, any such business opportunity is expressly offered to such director or officer solely in his or her capacity as our director or officer. In view of Riverstone's policies and practices with respect to the apportionment of business opportunities presented to the investment funds managed or advised by it and their respective portfolio companies, a business opportunity presented to such fund or portfolio company may generally be pursued by such fund (or other Riverstone funds, as applicable) or directed to any such portfolio company.

As a result, Riverstone may become aware, from time to time, of certain business opportunities, such as acquisition opportunities, and may direct such opportunities to other businesses in which it has invested, in which case we may not become aware of or otherwise have the ability to pursue such opportunities. Further, such businesses may choose to compete with us for these opportunities. As a result, our renouncing our interest and expectancy in any business opportunity that may be from time to time presented to Riverstone could adversely impact our business or prospects if attractive business opportunities are procured by such parties for their own benefit rather than for ours.

Our actual or perceived failure to deal appropriately with conflicts of interest with the Pattern Development Companies could damage our reputation, increase our exposure to potential litigation and have a material adverse effect on our business prospects, financial condition and results of operations.

Our conflicts committee is required to review, and make recommendations to the full Board of Directors regarding, any transactions involving the acquisition of an asset or investment in an opportunity offered to us by Pattern Energy Group LP or Pattern Development to determine whether the offer is fair and reasonable (including any acquisitions by us of assets of Pattern Energy Group LP or Pattern Development pursuant to our respective Purchase Rights). In addition, we have established certain governance procedures between ourselves and Pattern Development to manage conflicts issues which may arise between ourselves and Pattern Development, which include having the chair of the conflicts committee, or his designee, attend regularly scheduled meetings of the Pattern Development board at which the development pipeline will be reviewed and anticipated funding needs will be discussed, and regular reporting of reasonably expected potential conflicts between us and Pattern Development to the conflicts committee.

However, our establishment of a conflicts committee and governance procedures for our Pattern Development investment may not prevent holders of our shares from filing derivative claims against us related to these conflicts of interest and related party transactions. Regardless of the merits of their claims, we may be required to expend significant management time and financial resources on the defense of such claims. Additionally, to the extent we fail to appropriately deal with any such conflicts, it could negatively impact our reputation and ability to raise additional funds and the willingness of counterparties to do business with us, all of which could have a material adverse effect on our business prospects, financial condition and results of operations.

Market interest and foreign exchange rates may have an effect on the value of our Class A shares.

One of the factors that influences the price of our Class A shares will be the effective dividend yield of our Class A shares (i.e., the yield as a percentage of the then market price of our Class A shares) relative to market interest rates. Further increases in market interest rates, which currently remain relatively low compared to historical rates, may lead prospective purchasers of our Class A shares to expect a higher dividend yield and, our inability to increase our dividend as a result of an increase in borrowing costs, insufficient cash available

for distribution or otherwise, could result in selling pressure on, and a decrease in the market price of, our Class A shares as investors seek alternative investments with higher yield. Additionally, we intend to pay a regular quarterly dividend in U.S. dollars and, as a result, to the extent the value of the U.S. dollar dividend decreases relative to Canadian dollars, the market price of our Class A shares in Canada could decrease.

The price of our Class A shares may fluctuate significantly, and stockholders could lose all or part of their investment. Volatility in the market price of our shares may prevent stockholders from being able to sell their Class A shares at or above the price stockholders paid for their shares. The market price of our Class A shares could fluctuate significantly for various reasons, including, in addition to the realization of any risks described under this "Risk Factors" section: the public's reaction to our press releases, our other public announcements and our filings with the Canadian securities regulators and the SEC;

• changes in, or failure to meet, earnings estimates or recommendations by research analysts who track our Class A shares or the stock of other companies in our industry;

the failure of research analysts to cover our Class A shares;

changes in accounting standards, policies, guidance, interpretations or principles;

sales of Class A shares by us or members of our management team;

the granting or exercise of employee stock options; and

volume of trading in our Class A shares.

Volatility in the stock markets has had a significant impact on the market price of securities issued by many companies, including companies in our industry. The changes frequently appear to occur without regard to the operating performance of the affected companies. Hence, the price of our Class A shares could fluctuate based upon factors that have little or nothing to do with our company, and these fluctuations could materially reduce the share price of our Class A shares and cause stockholders to lose all or part of their investment. Further, in the past, market fluctuations and price declines in a company's stock have led to securities class action litigation. If such a suit were to arise, it could have a substantial cost and divert our resources regardless of the outcome.

We incur increased costs and demands upon management as a result of complying with the laws and regulations affecting public companies, which could harm our operating results.

As a public company, we incur significant legal, accounting, investor relations and other expenses, including costs associated with public company reporting requirements. We also have incurred and will incur costs associated with current corporate governance requirements, Section 404 and other provisions of the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as well as rules implemented by the SEC, the Canadian Securities Administrators and the stock exchanges on which our Class A shares are traded.

The expenses incurred by public companies for reporting and corporate governance purposes have increased dramatically over time. Greater expenditures may be necessary in the future with the advent of new laws and regulations pertaining to public companies. If we are not able to comply with these requirements in a timely manner, the market price of our Class A shares could decline and we could be subject to sanctions or investigations by the SEC, the Canadian Securities Administrators, the applicable stock exchanges or other regulatory authorities, which would require additional financial and management resources.

As a result of the FPA and FERC's regulations in respect of transfers of control, absent prior authorization by FERC, neither we cannot convey, and an investor in our company will generally not be permitted to obtain, a direct and/or indirect voting interest in 10% or more of our issued and outstanding voting securities, and a violation of this limitation could result in civil or criminal penalties under the FPA and possible further sanctions imposed by FERC under the FPA.

We are a holding company with U.S. operating subsidiaries that are "public utilities" (as defined in the FPA) and, therefore, subject to FERC's jurisdiction under the FPA. As a result, the FPA requires us to (i) obtain prior authorization from FERC to transfer an amount of our voting securities sufficient to convey direct or indirect control over any of our public utility subsidiaries or (ii) qualify for a blanket authorization granted under or an exemption from FERC's regulations in respect of transfers of control. Similar restrictions apply to purchasers of our voting securities who are a "holding company" under the PUHCA, in a holding company system that includes a transmitting utility or an electric utility, or an "electric holding company," regardless of whether our voting securities were purchased in our initial public offering, subsequent offerings by us, in open market transactions or otherwise. A purchaser of our

voting securities would be a "holding company" under the PUHCA and an electric holding company if the purchaser acquired direct or indirect control

over 10% or more of our voting securities or if FERC otherwise determined that the purchaser could directly or indirectly exercise control over our management or policies (e.g., as a result of contractual board or approval rights). Under the PUHCA, a "public-utility company" is defined to include an "electric utility company," which is any company that owns or operates facilities used for the generation, transmission or distribution of electric energy for sale, and which includes EWGs such as our U.S. operating subsidiaries. Accordingly, absent prior authorization by FERC or an increase to the applicable percentage ownership under a blanket authorization, for the purposes of sell-side transactions by us and buy-side transactions involving purchasers of our securities that are electric holding companies, no purchaser can acquire 10% or more of our issued and outstanding voting securities. A violation of these regulations by us, as seller, or an investor, as a purchaser of our securities, could subject the party in violation to civil or criminal penalties under the FPA, including civil penalties of up to approximately \$1.25 million per day per violation (which amount is adjusted annually to account for inflation) and other possible sanctions imposed by FERC under the FPA. As a result of the FPA and FERC's regulations in respect of transfers of control, and consistent with the requirements for blanket authorizations granted thereunder or exemptions therefrom, absent prior authorization by FERC, no purchaser of our Class A common stock in the open market, or in subsequent offerings of our voting securities, will be permitted to purchase an amount of our securities that would cause such purchaser and its affiliate and associate companies to collectively hold 10% or more of our voting securities outstanding. Additionally, investors should manage their investment in us in a manner consistent with FERC's regulations in respect of obtaining direct or indirect "control" of our company. Accordingly, absent prior authorization by FERC, investors in our Class A common stock are advised not to acquire a direct and/or indirect voting interest in 10% or more of our issued and outstanding voting securities, whether in connection with an offering by us in open market purchases or otherwise.

Provisions of our organizational documents and Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, as a result, depress the trading price of our Class A shares. Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions:

authorize the issuance of blank check preferred stock that our Board of Directors could issue to increase the number of outstanding shares and to discourage a takeover attempt;

prohibit our stockholders from calling a special meeting of stockholders;

prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;

provide that the Board of Directors is expressly authorized to adopt, or to alter or repeal our bylaws; and establish advance notice requirements for nominations for election to our Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

These anti-takeover defenses could discourage, delay or prevent a transaction involving a change in control of our company. These provisions could also discourage proxy contests and make it more difficult for stockholders to elect directors of their choosing and cause us to take corporate actions other than those desired.

Future sales of our shares in the public market could lower our Class A share price, and any additional capital raised by us through the sale of equity or convertible debt securities may dilute stockholders' ownership in us and may adversely affect the market price of our Class A shares.

While we did not conduct a follow-on offering of our Class A shares in 2018, we had conducted such offerings in each of the years from 2014 to 2017. We also have an "at-the-market" equity distribution program pursuant to which approximately \$144 million in aggregate offering price of our Class A shares remains available to be sold thereunder. In addition, previously in July 2015, we issued \$225 million aggregate principal amount of 4.00% Convertible Senior Notes due 2020. If we sell, or if other significant stockholders sell, additional large numbers of our Class A shares, or if we issue a large number of shares of our Class A common stock in connection with future acquisitions, financings, or other circumstances, the market price of our Class A shares could decline significantly. Moreover, the perception in the public market that we or another significant stockholder might sell Class A shares could depress the market price of those shares.

We cannot predict the size of future issuances of our Class A shares, sales of our Class A shares, or sales of securities convertible into our Class A shares, or the effect, if any, that any such future issuances or sales will have on the

market price of our shares. Sales of substantial amounts of our shares (including sales pursuant to PSP Investments' registration rights and shares issued in connection with an acquisition) or securities convertible into our shares, or the perception that such sales could occur, may adversely affect prevailing market prices for our Class A shares.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Leased Facilities

Our corporate headquarters and executive offices are located in San Francisco, California and we additionally lease office space in Houston, Texas.

Our Projects

We hold interests in 24 wind and solar power projects. Our projects are located in the United States, Canada and Japan. We have a total operating portfolio of approximately 4 GW and owned capacity of approximately 3 GW. We typically finance our wind and solar projects through project entity specific debt secured by each project's assets with no recourse to us. For details on our operating wind and solar power projects, please see Item 1 "Business - Our Operating Business Segment" in this Form 10-K.

Item 3. Legal Proceedings.

We are subject, from time to time, to various routine legal proceedings and claims arising out of the normal course of business. These proceedings primarily involve claims from landowners related to calculation of land royalties and warranty claims we initiate against

equipment suppliers. The outcome of these legal proceedings and claims cannot be predicted with certainty. Nevertheless, we believe the outcome of any of such currently existing proceedings, even if determined adversely, would not have a material adverse effect on our financial condition or results of operations. Item 4. Mine Safety Disclosures. Not applicable.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.

Our Class A common stock is traded on the National Association of Securities Dealers Automated Quotations (Nasdaq) Global Select Market and on the Toronto Stock Exchange (TSX) under the trading symbol "PEGI." On February 22, 2019, the last reported sale price of our Class A common stock on the Nasdaq Global Select Market was \$21.13 per share and on the TSX was C\$27.77 per share.

On May 9, 2016, we entered into an Equity Distribution Agreement. Pursuant to the terms of the Equity Distribution Agreement, we may offer and sell shares of our Class A common stock, par value \$0.01 per share, from time to time through the Agents, as our sales agents for the offer and sale of the shares, up to an aggregate sales price of \$200 million. For the year ended December 31, 2018, we did not sell shares under the Equity Distribution Agreement. Holders of Record

Because many of our shares of Class A common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders. As of February 22, 2019, there were approximately 14 stockholders of record of our Class A common stock. Stock performance chart

This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the "Exchange Act," or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any filing of Pattern Energy Group Inc. under the Securities Act of 1933, as amended, or the "Securities Act."

The following graph shows a comparison from December 31, 2013 through December 31, 2018 of the cumulative total stockholder return for our Class A common stock, the Nasdaq Composite Index (Nasdaq Composite) and the Philadelphia Utility Sector Index. The graph assumes that \$100 was invested at the market close on December 31, 2013 in the Class A common stock of Pattern Energy Group Inc., the Nasdaq Composite and the Philadelphia Utility Sector Index and also assumes reinvestments of dividends. The stock price performance of the following graph is not necessarily indicative of future stock price performance.

Cash Dividend to Investors

We intend to pay regular quarterly dividends in U.S. dollars to holders of our Class A stock. The following table sets forth the dividends declared on shares of Class A common stock for the periods indicated. On February 22, 2019, we maintained our dividend at \$0.4220 per share of Class A common stock, or \$1.688 per share of Class A common stock on an annualized basis, commencing with respect to dividends paid on April 30, 2019 to holders of record on March 29, 2019.

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	Dividends Declared									
2019										
First Quarter	\$	0.4220								
2018										
Fourth Quarter	\$	0.4220								
Third Quarter	\$	0.4220								
Second Quarter	\$	0.4220								
First Quarter	\$	0.4220								
2017										
Fourth Quarter	\$	0.4220								
Third Quarter	\$	0.4200								
Second Quarter	\$	0.4180								
First Quarter	\$	0.4138								

We have established our quarterly dividend level based on a targeted cash available for distribution payout ratio, after considering the annual cash available for distribution that we expect our projects will be able to generate and with due regard to retaining a portion of the cash available for distribution to grow our business. We intend to grow our business primarily through the acquisition of operational and construction ready power projects, which, we believe, will facilitate the growth of our cash available for distribution and enable us to increase our dividend per share of Class A common stock over time. We may in the future raise capital and make investments in new power projects upon or near the commencement of construction of such projects and therefore prior to the expected commencement of operations of the new projects, which could result in a passage of time of twelve or more months before we begin to receive any cash flow contributions from such projects to our cash available for distribution. In connection with these investments, we may increase our dividends prior to the receipt of such cash flow contributions, which would likely cause our payout ratio to temporarily exceed our targeted run-rate payout ratio. However, the determination of the amount of cash dividends to be paid to holders of our Class A common stock will be made by our Board of Directors and will depend upon our financial condition, results of operations, cash flow, long-term prospects and any other matters that our Board of Directors deem relevant. See Item 1A "Risk Factors—Risks Related to Ownership of our Class A Shares—Our ability to pay regular dividends on our Class A shares is subject to the discretion of our Board of Directors, and our cash dividend policy is subject to change."

We expect to pay a quarterly dividend on or about the 30th day following each fiscal quarter to holders of record of our Class A common stock on the last day of such quarter.

Repurchase of Equity Securities

The table below provides information with respect to repurchases of our Class A common stock during the fourth quarter ended December 31, 2018. All shares were tendered to us in satisfaction of director or employee tax withholding obligations upon the vesting of restricted stock grants under our 2013 Equity Incentive Award Plan. We currently do not have a stock repurchase plan in place.

Period	Total Number of	Average Price
renou	Shares Purchased	Paid Per Share
10/1/18-10/31/18	_	\$ —
11/1/18-11/30/18	_	\$ —
12/1/18-12/31/18	44,255	\$ 20.89
	44,255	\$ 20.89

For information on the equity compensation plans, see Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

Item 6. Selected Financial Data.

Set forth below is our summary historical consolidated financial data. This information may not be indicative of our future results of operations, financial position and cash flows and should be read in conjunction with the consolidated financial statements and notes thereto and Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" presented elsewhere in this Form 10-K. We believe that the assumptions underlying the preparation of our historical consolidated financial statements are reasonable.

	Year Ended December 31,									
	2018	2017	2016	2015	2014					
	(in milli									
Statement of operations data:										
Total revenue	\$483	\$411	\$354	\$330	\$265					
Operating income	2	10	5	37	58					
Net income (loss)	(69)	(82)	(52)	(56)	(40)					
Net loss attributable to noncontrolling interests	(211)	(64)	(35)	(23)	(9)					
Net income (loss) attributable to Pattern Energy	\$142	\$(18)	\$(17)	\$(33)	\$(31)					
Earnings (loss) per share data:										
Class A common stock: basic earnings (loss) per share	\$1.45	\$(0.20)	\$(0.22)	\$(0.46)	\$(0.56)					
Class A common stock: diluted earnings (loss) per share	\$1.45	\$(0.20)	\$(0.22)	\$(0.46)	\$(0.56)					
Class B common stock: basic and diluted loss per share	N/A	N/A	N/A	N/A	(0.49)					
Dividends:										
Dividends declared per Class A common share	\$1.69	\$1.67	\$1.58	\$1.43	\$1.30					
Deemed dividends per Class B common share	N/A	N/A	N/A	N/A	\$1.41					
Balance sheet data:										
Total assets	\$5,294	\$4,742	\$3,753	\$3,830	\$2,795					
Corporate revolving credit facility	\$198	\$—	\$180	\$355	\$50					
Long-term debt including current portion, net of financing costs	\$2,085	\$1,931	\$1,384	\$1,416	\$1,414					
Total liabilities	\$3,135	\$2,394	\$1,874	\$2,054	\$1,631					

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations
The following discussion and analysis of our financial condition and results of operations should be read in
conjunction with our financial statements and related notes included elsewhere in this Form 10-K. The following
discussion contains "forward-looking statements" that reflect our future plans, estimates, beliefs and expected
performance. Our actual results may differ materially from those currently anticipated and expressed in such
forward-looking statements as a result of a number of factors, including those we discuss under Item 1A "Risk
Factors" elsewhere in this Form 10-K. We caution that assumptions, expectations, projections, intentions or beliefs
about future events may, and often do, vary from actual results and the differences can be material. See "Cautionary
Notice Regarding Forward-Looking Statements."

Overview

We are a vertically integrated renewable energy company with a mission to transform the world to renewable energy. Our business consists of both (i) an operating business segment, which is comprised of a portfolio of renewable energy power projects and (ii) a development investment segment, which principally consists of our 29% ownership interest in Pattern Development, an upstream development platform. Prior to 2018, we had one reportable segment. The development investment segment was acquired in July 2017 and had insignificant operations. As such, comparative periods are not material or meaningful.

Through our operating business segment, we hold ownership interests in 24 renewable energy projects with a total operating portfolio capacity of approximately 4 GW in the United States, Canada and Japan. Projects in which we have an owned interest use proven, best-in-class technology and have contracted to sell all or a majority of their output pursuant to long-term, fixed-price PSAs. Approximately 92% of the electricity to be generated by our projects will be sold under our PSAs which have a weighted average remaining contract life of approximately 13 years as of December 31, 2018.

Our development investment segment engages in the upstream development of renewable power projects around the world currently spanning the United States, Canada, Mexico and Japan. Our current relationship with Pattern Development, which includes our Identified ROFO Projects, shared services and overlap of executive officers, provides alignment with our operating business segment and provides us access to a pipeline of development projects we have an ability to acquire to grow our business, or through our ownership interest, share in returns in the event a development project is sold to third parties. Pattern Development has more than a 10 GW pipeline of development projects.

We intend to maximize long-term value for our stockholders in an environmentally responsible manner and with respect for the communities in which we operate. Our business is built around three core values of creative energy and spirit, pride of ownership and a team-first attitude, which guide us in creating a safe, high-integrity work environment, applying rigorous analysis to all aspects of our business and proactively working with our stakeholders to address environmental and community concerns. Our financial objectives, which we believe will maximize long-term value for our stockholders, are to produce stable and sustainable cash available for distribution, selectively grow our project portfolio and our dividend per Class A share and maintain a strong balance sheet and flexible capital structure. The discussion and analysis below has been organized as follows:

2018 Significant Activity

Factors that Significantly Affect our Business

Trends Affecting our Industry

Factors Affecting our Operational Results

Key Performance Metrics

Results of Operations

Liquidity and Capital Resources

Sources of Liquidity

Uses of Liquidity

Covenants, Distribution Conditions and Events of Default

Critical Accounting Policies and Estimates

2018 Significant Activity

In December 2018, we sold our 33.3% owned interest in the 270 MW K2 project in Ontario, Canada, for cash proceeds of \$158 million.

In November 2018, we acquired 35 MW of owned capacity as a Class B member in Stillwater, an 80 MW project in Stillwater County, Montana, for cash proceeds of \$24 million.

In September 2018, we committed to a plan to repower the 283 MW Gulf Wind project starting in 2019. We entered into a turbine purchase agreement for a maximum purchase price of \$151 million, depending upon the number of turbines purchased.

In August 2018, we sold our 74% owned interest in the 115 MW El Arrayán project in Chile, for a sale price of \$70 million.

In August 2018, we acquired a 51% owned interest in the 143 MW Mont Sainte-Marguerite project in Québec, for cash proceeds of \$39 million.

In 2018, we funded approximately \$115 million into Pattern Development which increased our ownership interest to 29%.

In March 2018, we acquired 206 MW of owned capacity in five Japanese projects which represents our entry into Japan, for approximately \$177 million of cash and post-closing contingent payments. The fair value of such contingent payments is approximately \$106 million.

Factors that Significantly Affect our Business

Our results of operations in the near-term, as well as our ability to grow our business and revenue from electricity sales over time, could be impacted by a number of factors, including trends affecting our industry and factors affecting our operating results as discussed below:

Trends Affecting our Industry

The growth in the industry is largely attributable to renewable energy's increasing cost competitiveness with other power generation technologies, the advantages of wind and solar power over other renewable energy sources and growing public support for renewable energy driven by energy security and environmental concerns.

We believe that the key drivers for the long-term growth of renewable power include:

consistent multi-year trend of total global investment in new renewable electricity generation sources being twice that of investment in conventional fossil generation;

efficiency and capital cost improvements in wind, solar and other renewable energy technologies, enabling wind, solar and other forms of renewable energy to compete successfully in more markets;

improvements in wind, solar and other renewable energy technologies which, when paired with cheap natural gas, continues to drive down power prices;

significant ongoing demand created by corporate and industrial buyers directly procuring renewable electricity on a large scale;

increasing deployment of storage technologies resulting in enhanced reliability and provision of grid services by utility scale wind and solar providers;

increased demand for renewable energy resulting from regulatory or policy initiatives. Notable initiatives include country, state or provincial RPS programs;

governmental incentives for renewable energy including feed-in-tariff regimes, carbon credits and the U.S. federal based PTCs or ITCs, which are subject to phase down for wind projects that begin construction by 2019 and solar projects that begin construction by 2021, that improve the cost competitiveness of renewable energy compared to traditional sources;

environmental and social factors supporting increasing levels of wind, solar and other renewable technologies in the generation mix;

regulatory barriers, market pressure and public acceptance challenges increasing the time, cost and difficulty of permitting new fossil fuel-fired facilities, notably coal, and nuclear facilities;

decommissioning of aging coal-fired and nuclear facilities is expected to leave a gap in electricity supply to be filled by cost-effective renewable and natural gas generation;

policy initiatives at both the state and federal levels to include externalities, such as the cost of carbon pollution, methane leakage and water usage in conventional fossil fuel-fired electricity generation, over time will increase costs

of conventional generation; and

ongoing shift within the portfolios of U.S based investor-owned utilities toward lower carbon emitting sources of power.

In general, we continue to believe that there will be additional acquisition and asset recycling opportunities in the short-term and that the longer-term growth trend will continue.

Our Outlook

Our near-term growth strategy will continue to focus on wind and solar power projects. We expect that most of our short-term growth will come from opportunities to acquire or invest in the Identified ROFO Projects, but we will evaluate unaffiliated third-party asset acquisition opportunities as well. In addition, we will continue to evaluate further investment in Pattern Development as discussed below.

Factors Affecting our Operational Results

The primary factors that will affect our financial results are (i) electricity sales of our operating projects, (ii) impact of derivative instruments, (iii) acquisitions, divestitures and investments, (iv) project operations (v) debt financing, (vi) congestion in the Texas market, and (vii) general and administrative costs.

Electricity Sales of our Operating Projects

Our projects are generally unaffected by short-term trends given that 92% of the electricity to be generated by our projects is to be sold under our fixed-price PPAs. Our PPA portfolio provides long-term revenue security with an average remaining contract life of 13 years as of December 31, 2018. Revenue from project sites is determined by the contracted price of electricity and any environmental attributes we sell under our PPAs multiplied by the amount of metered electricity that we produce. Actual energy production will vary based on the prevailing environmental conditions and technical constraints that exist at each facility.

We base our estimates of each project's capacity to generate electricity on the findings of our internal and external experts' long-term meteorological studies, which include data collected from measurement equipment on the property and relevant reference wind and solar data from other sources, as well as expected performance of our equipment over time. The result of our meteorological analysis is a probabilistic assessment of a project's likely annual output. A P50 level of annual production indicates we believe a 50% probability exists that the electricity generated from a project will exceed a specified aggregate amount of electricity generation during a given year. The P50 production level provides the foundation for our base case expectation; however, in reality, there can be significant variability between annual production and the P50. In addition to annual P50 variability, we also expect seasonal variability to occur. Variability increases as the period of review shortens, so it is likely that we will experience more variability in daily, monthly, or quarterly production than we do for annual production. Therefore, our periodic cash flow and payout ratios will also reflect more variability during periods shorter than a year. As a result, we use our available liquidity as well as certain project level cash reserves to help manage short-term production and cash flow variability. Our electricity generation is also dependent on the equipment that we use. We have selected high-quality equipment with a goal of having a concentration of equipment from top-tier manufacturers. With a combination of scale and developing in-house operating capability, we have structured our projects such that we may expect high availability and long-term production from the equipment. Given our manufacturers' global fleet sizes and strong balance sheets, the warranties that we secure for our turbines and our operating approach, we are confident in our expectations for reliable long-term turbine operation.

Impact of Derivative Instruments

Where possible, we employ a variety of derivative instruments to manage our exposure to fluctuations in electricity prices, interest rates and foreign currency exchange rates. We have experienced in the past, and expect to record in the future, substantial volatility in the components of our net income that relate to the mark-to-market adjustments on our undesignated cash flow hedges.

We believe that mark-to-market adjustments that we make to the fair value of our derivative assets and liabilities are generally mirrored by changes in the economic value of the related operating or financial assets, such as our wind projects and our project loans, for which the application of accounting principles generally accepted in the United States (U.S. GAAP) does not permit us to record such economic gains and losses. For this reason, and because one of our principal financial objectives is to produce stable and sustainable cash available for distribution, we believe that the economic value to our shareholders reflected in these derivative instruments, outweighs the risk of volatility in net income that we expect to report. Accordingly, we believe it is useful to investors to consider supplemental

performance metrics that we report, such as adjusted earnings before interest, taxes, depreciation, amortization and accretion (Adjusted EBITDA) and cash available for distribution, where we have subtracted and added back, as applicable, the unrealized gains and losses arising from mark-to-market adjustments on our derivative instruments.

Acquisitions, Divestitures and Investments

Our ability to grow our cash available for distribution is substantially dependent on our ability to make acquisitions. During 2018, our acquisitions of entities in Japan, MSM and Stillwater increased our operating capacity 314 MW, or 12%, including 39 MW of solar renewable energy projects. From time to time, we may also consider the disposal of a project, particularly if we believe we can utilize funds realized from such a disposal in a more productive manner or generate a higher return on investment. During 2018, our disposals of El Arrayán and our minority interest in K2 decreased our operating capacity 171 MW, or 6%.

As of December 31, 2018, we have funded approximately \$183 million in aggregate and hold an approximate 29% ownership interest in Pattern Development. Our additional investments during 2018 in Pattern Development facilitates additional long-term capital for Pattern Development to support the growth in the development pipeline thereby providing us with additional potential acquisition opportunities in the future, or the potential to share in returns for sales to third parties, through our 29% ownership interest in Pattern Development. Strategic benefits include a strengthened link to Pattern Development's development pipeline and increased return on investment expectations commensurate with increased development risk. To the extent we invest in Pattern Development, we will be initially exposed to capital requirements and development risk prior to having certainty that a project can move forward. As projects are successfully completed, we anticipate that our return on our capital investment will increase. However, there are risks in project development including, but not limited to, permitting challenges, failure to secure PPAs, failure to procure the requisite financing, equipment or interconnection, or an inability to satisfy the conditions to effectiveness of project agreements such as PPAs. For the year ended December 31, 2018, our loss in Pattern Development is as follows (in millions):

	For the	
	Year	
Earnings (Loss) in Pattern Development	Ended	
	Decemb	er
	31, 2018	3
Pattern Development net loss	\$ (121)
Our ownership portion of the net loss	(35)
Intra-entity gain elimination	(5)
Loss in earnings of Pattern Development	\$ (40)

Our aggregate owned capacity is approximately 3 GW. We expect that the acquisition of operational power projects from the Pattern Development Companies and other third parties will continue to contribute to our operational results. In 2019, we added 400MW of new wind projects as Identified ROFO Projects, consisting of three projects in New Mexico with contracted sales to purchasers in the California market. Below is a summary of the Identified ROFO Projects that we may acquire from Pattern Energy Group LP and Pattern Development in connection with our Project Purchase Rights:

						Capac	ity (MW)
							Pattern
Identified	Status	Location	Construction	Commercial	Contract	Rated	Development
ROFO Projects	Status	Location	Start (1)	Operations (2)	Type	(3)	Companies
							Owned (4)
Pattern Energy Grou	ıp LP						
Belle River	Operational	Ontario	2016	2017	PPA	100	43
North Kent	Operational	Ontario	2017	2018	PPA	100	35
Henvey Inlet	In construction	Ontario	2017	2019	PPA	300	150
Pattern Developmen	ıt						
Crazy Mountain	Late stage development	Montana	2019	2019	PPA	80	68
Grady	In construction	New	2018	2019	PPA	220	188
Grady	III Construction	Mexico	2016	2019	IIA	220	100
Sumita		Japan	2020	2022	PPA	100	55

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	Late stage development						
Ishikari	Late stage development	Japan	2020	2022	PPA	112	112
Corona Wind Project(s)	Late stage development	New Mexico	2020	2021	PPA	400	340
•	•					1,412	991

⁽¹⁾ Represents year of actual or anticipated commencement of construction.

⁽²⁾ Represents year of actual or anticipated commencement of commercial operations.

Rated capacity represents the maximum electricity generating capacity of a project in MW. As a result of weather

⁽³⁾ and other conditions, a project will not operate at its rated capacity at all times and the amount of electricity generated may be less than its rated capacity. The amount of electricity generated may vary based on a variety of factors.

Pattern Development Companies-Owned capacity represents the maximum, or rated, electricity generating capacity of the project in MW multiplied by Pattern Energy Group LP's or Pattern Development's percentage ownership interest in the distributable cash flow of the project.

Project Operations

Turbine Availability

Our ability to generate electricity in an efficient and cost-effective manner is impacted by our ability to maintain the operating capacity of our projects. We use reliable and proven wind turbines, solar panels and other equipment for each of our projects. For the years ended December 31, 2018 and 2017, our turbine availability across our projects was approximately 97% and 97%, respectively, which is in line with industry standards and our original investment projections that were reviewed by independent engineering firms.

Operations and maintenance - self-perform

At certain projects where we self-perform maintenance and service activities, we maintain long-term turbine manufacturer service arrangements pursuant to which the turbine manufacturer continues to provide routine and corrective maintenance service, but we are responsible for a portion of the maintenance and repairs, including on major component parts. Over time, we expect to increase our operational responsibility, including self-performing maintenance and service work with our own technicians instead of utilizing service providers, which we believe will continue to help us reduce our costs. As service arrangements expire at the facilities where we utilize external third-parties, we intend to determine on a case-by-case basis the most appropriate approach of either entering into new service arrangements with the same or a different external third-party, or transitioning to self-performance of maintenance and service activities. As of December 31, 2018, we had a total of five projects that had completed the transition to self-perform. In 2018, we realized savings of approximately \$5 million under the self-perform model when compared to the contracted period in 2017.

Debt Financing

We intend to use a portion of our revenue from electricity sales to cover our interest expense and principal payments on borrowings under financing facilities. Our interest expense primarily reflects (i) periodic interest on the term loan financing arrangements, including the effects of interest rate swaps, at our other operating projects, (ii) interest on our convertible senior notes issued in 2015 and the unsecured senior notes issued in 2017, (iii) interest on short-term loan facilities, including any borrowings under our revolving credit facilities and (iv) imputed interest on the lease financing of our Hatchet Ridge project.

We believe that our projects have been financed on average with stronger coverage ratios than is typical in our industry. A debt service coverage ratio is generally defined as a project's operating cash flows divided by scheduled payments of principal and interest for a period. While we believe that the commercial bank market generally seeks a minimum average annual debt service coverage ratio for wind power projects, based on P50 output levels, of between 1.4 and 1.5 to 1.0, our projects, on a portfolio basis, have an expected average annual debt service coverage ratio over the remaining scheduled loan amortization periods of approximately 1.9 to 1.0.

Congestion in the Texas market

In addition to the risks we face in broad commodity markets, many of our projects, especially in ERCOT, also face project-specific risks related to transmission system limitations which can result in local or nodal prices that are lower than the broader market prices (congestion). In the case of adverse congestion, our revenues are negatively impacted, and our financial hedges do not protect us from these impacts, since under those contracts, this risk is fully allocated to our projects and not to the counterparty (e.g. we sell our power at the lower local price, but still have to buy power for the counterparty at the higher broad market or hub price). In the past, these impacts have been material to our economic results, and we expect that congestion will continue to be a material risk, in the future.

General and Administrative Cost

In addition to reducing our project expense through restructuring service agreements and a transition to self-perform, we are also focused on measures to reduce our general and administrative expenses, including our net related party charges to and from Pattern Development Companies. We are investing in a number of efficiency initiatives (principally automation and other process improvements) in accounting, procurement, human resources, loan administration, and asset management, among others, that we believe will also result in a lower administrative cost structure.

Key performance metrics

We regularly review a number of financial measurements and operating metrics to evaluate our operating performance, engage in financial planning, measure our growth and make strategic acquisition and investment decisions. In addition to traditional U.S. GAAP performance

measures, such as total revenue, cost of revenue, and net loss, our management uses supplemental performance operating metrics such as MWh sold, average realized electricity price, and non-GAAP measures, including Adjusted EBITDA and cash available for distribution.

Adjusted EBITDA

We define Adjusted EBITDA as net income (loss) before net interest expense, income taxes, and depreciation, amortization and accretion, including our proportionate share of net income (loss) before interest expense, income taxes, and depreciation, amortization and accretion of unconsolidated investments. Adjusted EBITDA also excludes the effect of certain mark-to-market adjustments, gain or loss related to acquisitions, divestitures, or refinancing transactions, adjustments from unconsolidated investments, and infrequent items not related to normal or ongoing operations. In calculating Adjusted EBITDA, we exclude mark-to-market adjustments to the value of our derivatives because we believe that it is useful for investors to understand, as a supplement to net income (loss) and other traditional measures of operating results, the results of our operations without regard to periodic, and sometimes material, fluctuations in the market value of such assets or liabilities.

Management believes Adjusted EBITDA assists investors and analysts in comparing our operating performance across reporting periods on a consistent basis by excluding items that our management believes are not indicative of our core operating performance and to compare our business to that of our peers. Using Adjusted EBITDA, which is a non-U.S. GAAP measure, enables our management to evaluate our operating performance, our ability to meet debt service and other capital obligations and to measure the effectiveness of our overall capital structure. The most directly comparable U.S. GAAP measure to Adjusted EBITDA is net income (loss).

However, Adjusted EBITDA has limitations as an analytical tool. Some of these limitations include: Adjusted EBITDA

does not reflect our cash expenditures or future requirements for capital expenditures or contractual commitments; does not reflect changes in, or cash requirements for, our working capital needs;

does not reflect the significant interest expense, or the cash requirements necessary to service interest or principal payments, on our debt, or our proportional interest in the interest expense of our unconsolidated investments or the cash requirements necessary to service interest or principal payments on the debt borne by our unconsolidated investments;

does not reflect our income taxes or the cash requirement to pay our taxes; or our proportional interest in income taxes of our unconsolidated investments or the cash requirements necessary to pay the taxes of our unconsolidated investments;

does not reflect depreciation, amortization and accretion which are non-cash charges; or our proportional interest in depreciation, amortization and accretion of our unconsolidated investments. The assets being depreciated, amortized and accreted will often have to be replaced in the future, and Adjusted EBITDA does not reflect any cash requirements for such replacements; and

does not reflect the effect of certain mark-to-market adjustments and non-recurring items or our proportional interest in the mark-to-market adjustments at our unconsolidated investments.

We do not have control, nor have any legal claim to the portion of the unconsolidated investees' revenues and expenses allocable to our joint venture partners. As we do not control, but do exercise significant influence, we account for the unconsolidated investments in accordance with the equity method of accounting. Net earnings from these investments are reflected within our consolidated statements of operations in "Earnings in unconsolidated investments, net." Adjustments related to our proportionate share from unconsolidated investments include only our proportionate amounts of interest expense, income taxes, depreciation, amortization and accretion, and mark-to-market adjustments included in "Earnings in unconsolidated investments, net;" and

Other companies in our industry may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

Because of these limitations, Adjusted EBITDA should not be considered in isolation or as a substitute for performance measures calculated in accordance with U.S. GAAP. You should not consider Adjusted EBITDA as an alternative to net income (loss), as determined in accordance with U.S. GAAP. Cash Available for Distribution

We define cash available for distribution as Adjusted EBITDA further adjusted to (i) subtract unconsolidated investment earnings, (ii) subtract interest expense, less non-cash items, (iii) subtract distributions to noncontrolling interests, (iv) subtract principal payments

paid from operating cash flows, (v) subtract income taxes, (vi) subtract non-expansionary capital expenditures, (vii) add distributions from unconsolidated investments, (viii) add net release of restricted cash, (ix) add stock-based compensation, (x) add pay-go contributions, and (xi) add or subtract other items as necessary to present the cash flows we deem representative of our core business operations.

Management believes that cash available for distribution is indicative of our core operating performance. As a result, as of December 31, 2018, we have changed our key metric, cash available for distribution, from a liquidity metric to a performance metric. For the periods presented, we reconcile Adjusted EBITDA and cash available for distribution to net income (loss), the most directly comparable GAAP financial measure. The change to a performance metric did not change the amount of cash available for distribution previously reported. Cash available for distribution is a supplemental performance measure used by management and external users of our financial statements to measure our performance across reporting periods on a consistent basis by excluding items that our management believes are not indicative of our core operating performance and to compare our business to that of our peers. Cash available for distribution serves as an important measure of our performance and enables our management to evaluate our ability to meet dividend expectations, the amount of internal capital available for new investment opportunities that can enhance our ability to grow our dividends over time, and the suitability of our corporate debt levels.

However, cash available for distribution has limitations as an analytical tool. Some of the limitations are: Cash available for distribution:

excludes depreciation, amortization and accretion;

does not capture the level of capital expenditures necessary to maintain the operating performance of our projects or complete the construction of acquired projects;

is not reduced for principal payments on our project indebtedness except to the extent they are paid from operating cash flows during a period; and

excludes the effect of certain other cash flow items, all of which could have a material effect on our financial condition and results from operations.

Other companies in our industry may calculate cash available for distribution differently than we do, limiting its usefulness as a comparative measure.

Because of these limitations, cash available for distribution should not be considered in isolation or as a substitute for performance measures calculated in accordance with U.S. GAAP. You should not consider cash available for distribution as an alternative to net income (loss), determined in accordance with U.S. GAAP, nor does it represent funds actually available to fund our current dividend commitments.

The following tables present a reconciliation of Adjusted EBITDA and cash available for distribution to net income (loss), the most directly comparable GAAP financial measure, for the periods indicated (unaudited and in millions):

	Year e	nded	
	Decen	iber 31,	
	2018	2017	2016
Net loss	\$(69)	\$(82)	\$(52)
Plus:			, ,
Interest expense, net of interest income	107	101	76
Income tax provision	32	12	9
Depreciation, amortization and accretion	280	215	184
EBITDA	\$350	\$246	\$217
Unrealized (gain) loss on derivatives	5	18	23
Early extinguishment of debt	6	9	
Impairment expense	7		
(Gain) loss on asset sales	(71)		
Other	2	6	3
Plus, proportionate share from unconsolidated investments:			
Interest expense, net of interest income	38	39	32
Income tax provision (benefit)	1		
Depreciation, amortization and accretion	35	35	28
(Gain) loss on derivatives	(1)	(9)	1
Adjusted EBITDA	\$372	\$344	\$304
Plus:			
Distributions from unconsolidated investments	58	67	57
Network upgrade reimbursement	1	9	5
Release of restricted cash	4	7	1
Stock-based compensation	5	5	5
Pay-go contribution	4		
Other	1	(5)	(8)
Less:			
Unconsolidated investment earnings and proportionate shares for EBITDA	(85)	(118)	(98)
Interest expense, less non-cash items and interest income	(99)	(91)	(66)
Income taxes	(4)		
Non-expansionary capital expenditures		(1)	(1)
Distributions to noncontrolling interests	(38)	(20)	(18)
Principal payments paid from operating cash flows	(52)	(51)	(48)
Cash available for distribution	\$167	\$146	\$133

Adjusted EBITDA for the year ended December 31, 2018 was \$372 million compared to \$344 million in the prior year, an increase of \$28 million, or approximately 8%. The increase in Adjusted EBITDA during 2018 as compared to 2017 was primarily due to an \$83 million increase in revenue (excluding unrealized loss on energy derivative and amortization of PPAs) primarily attributable to increases in electricity sales as a result of our 2018 and 2017 acquisitions and an insurance settlement for Santa Isabel partially offset by a volume decrease due to the disposition of El Arrayán.

The increase was further offset by:

- n \$33 million decrease in our proportionate share of Adjusted EBITDA from unconsolidated investments;
- a \$13 million increase in project expenses; and
- a \$7 million increase in transmission costs.

Adjusted EBITDA for the year ended December 31, 2017 was \$344 million compared to \$304 million in the prior year, an increase of \$40 million, or approximately 13%. The increase in Adjusted EBITDA during 2017 as compared to 2016 was primarily due to:

- a \$49 million increase in revenues (excluding unrealized loss on energy derivative and amortization of PPAs) primarily attributable to projects which were acquired or commenced commercial operations in 2017; and
- a \$21 million increase in our proportionate share of Adjusted EBITDA from unconsolidated investments.

These increases were partially offset by:

- a \$21 million increase in project expense and transmission cost;
- a \$7 million increase in operating expenses; and
- a \$1 million increase in transaction cost.

Cash available for distribution was approximately \$167 million for the year ended December 31, 2018 as compared to approximately \$146 million in the prior year. This approximate \$21 million increase in cash available for distribution was primarily due to an \$83 million increase in revenues (excluding unrealized loss on energy derivative and amortization of PPAs) driven by projects acquired during 2018 and 2017 and \$4 million from pay-go contributions. These increases were partially offset by:

- an \$18 million increase in distributions to noncontrolling interests;
- a \$13 million increase in project expenses;
- a \$9 million decrease in total distributions from unconsolidated investments;
- a \$9 million increase in interest expense (excluding amortization of financing costs and debt discount/premium) primarily due to additional debt associated with our acquisitions;
- an \$8 million decrease in network upgrade reimbursement;
- a \$7 million increase in transmission costs; and
- a \$3 million decrease in release of restricted cash.

Cash available for distribution was approximately \$146 million for the year ended December 31, 2017 as compared to approximately \$133 million in the prior year. This approximate \$13 million increase in cash available for distribution was due to:

- a \$49 million increase in revenues (excluding unrealized loss on energy derivative and amortization of PPAs) driven by projects acquired during 2017;
- a \$11 million increase in total distribution from unconsolidated investments;
- a \$7 million increase in release of restricted cash to fund project costs; and
- a \$5 million increase in network upgrade reimbursement primarily related to Broadview.

These increases were partially offset by:

- a \$23 million increase in interest expense (excluding amortization of financing costs and debt discount/premium) primarily due to the issuance of the unsecured senior notes in January 2017 and debt associated with our acquisitions;
- a \$21 million increase in transmission cost and project expense;
- a \$7 million increase in operating expenses;
- a \$4 million increase in principal payments of project-level debt; and
- a \$2 million increase in distributions to noncontrolling interests.

MWh Sold and Average Realized Electricity Price

The number of consolidated MWh, unconsolidated investments proportional MWh and proportional MWh sold, as well as consolidated average realized price per MWh and the proportional average realized price per MWh sold, are the operating metrics that help explain trends in our revenue, earnings from our unconsolidated investments and net income (loss) attributable to us.

Consolidated MWh sold for any period presented, represents 100% of MWh sold by wholly-owned and partially-owned subsidiaries in which we have a controlling interest and are consolidated in our consolidated financial statements;

Noncontrolling interest MWh represents that portion of partially-owned subsidiaries not attributable to us; Controlling interest in consolidated MWh is the difference between the consolidated MWh sold and the noncontrolling interest MWh;

Unconsolidated investments proportional MWh is our proportion in MWh sold from our equity method investments; Proportional MWh sold for any period presented, represents the sum of the controlling interest and our percentage interest in our unconsolidated investments; and

Average realized electricity price for each of consolidated MWh sold, unconsolidated investments proportional MWh sold, and proportional MWh sold represents (i) total revenue from electricity sales for each of the respective MWh sold, discussed above, excluding unrealized gains and losses on our energy derivative and the amortization of long-lived intangible assets and liabilities, divided by (ii) the respective MWh sold.

The following table presents selected operating performance metrics for the periods presented (unaudited):

	Year ended						
	December 31,						
MWh sold	2018	20	17	Ch	nange	% C	Change
Consolidated MWh sold	8,479,	24,7	700,853	77	8,394	10	%
Less: noncontrolling MWh	(1,696)	,71	£147,409	(54	49,307	48	%
Controlling interest in consolidated MWh	6,782,	56,1	553,444	22	9,087	3	%
Unconsolidated investments proportional MWh	1,205,	6 6, I	240,681	(3:	5,020	(3)%
Proportional MWh sold	7,988,	192	794,125	19	4,067	2	%
Average realized electricity price per MWh							
Consolidated average realized electricity price per MWh	\$58	\$	54	\$	4	7	%
Unconsolidated investments proportional average realized electricity price per MWh	\$117	\$	117	\$	_	_	%
Proportional average realized electricity price per MWh	\$71	\$	66	\$	5	8	%

Our consolidated MWh sold for the year ended December 31, 2018 was 8,479,247 MWh, as compared to 7,700,853 MWh for the year ended December 31, 2017, an increase of 778,394 MWh, or 10%. The change in consolidated MWh sold was primarily attributable to an increase in volume of approximately 815,649 MWh as a result of acquisitions in 2018 and 2017. This increase was partially offset by a decrease in volume of 109,895 MWh as a result of the sale of El Arrayán.

Our proportional MWh sold for the year ended December 31, 2018 was 7,988,192 MWh, as compared to 7,794,125 MWh for the year ended December 31, 2017, an increase of 194,067 MWh, or 2%. The change in proportional MWh sold was primarily attributable to an increase in volume of 656,055 MWh as a result of acquisitions in 2018 and 2017. This increase was partially offset by:

- a decrease in volume of 392,361 MWh due to a reduction in our proportional ownership interest at Panhandle 2 at the end of 2017 and the sale of El Arrayán in 2018;
- a decrease in volume of 34,607 MWh in controlling interest in consolidated MWh primarily due to unfavorable wind; and
- a decrease in volume of 35,020 MWh from unconsolidated investments primarily due to curtailment.

Our consolidated average realized electricity price was \$58 per MWh for the year ended December 31, 2018 as compared to \$54 per MWh for the year ended December 31, 2017. The increase of \$4 per MWh was primarily due to higher PPA prices associated with our 2018 acquisitions.

Proportional average realized electricity price was \$71 per MWh for the year ended December 31, 2018 as compared to \$66 per MWh for the year ended December 31, 2017. The increase of \$5 per MWh in the proportional average realized electricity price was primarily due to higher PPA prices associated with our 2018 acquisitions and due to a reduction in our proportional ownership interest at Panhandle 2 at the end of 2017.

The following table presents selected operating performance metrics for the periods presented (unaudited):

	y ear ended			
	December 31,			
MWh sold	2017 2016 CI	hange '	% Change	
Consolidated MWh sold	7,700,8 6 , 3 745,525 95	55,328	14 %	
Less: noncontrolling MWh	(1,14 7,499 0,358) (2	207,051	22 %	
Controlling interest in consolidated MWh	6,553,4\$4,805,167 74	48,277	13 %	
Unconsolidated investments proportional MWh	1,240,68,001,105 23	39,576	24 %	
Proportional MWh sold	7,794,1 6,% 06,272 98	37,853	15 %	
Average realized electricity price per MWh				
Consolidated average realized electricity price per MWh	\$54 \$55 \$	(1)	(2)%	
Unconsolidated investments proportional average realized electricity price per MWh	\$117 \$ 112 \$	5	4 %	
Proportional average realized electricity price per MWh	\$66 \$66 \$		%	

Our consolidated MWh sold for the year ended December 31, 2017 was 7,700,853 MWh, as compared to 6,745,525 MWh for the year ended December 31, 2016, an increase of 955,328 MWh, or 14%. The change in consolidated MWh sold was primarily attributable to:

an increase in volume of 917,166 MWh as a result of acquisitions in 2017; and

a 254,443 MWh increase in volume from projects that existed in 2016 primarily due to favorable wind conditions. This increase was partially offset by a decrease in volume of 216,146 MWh from projects that existed in 2016 primarily due to lower availability and curtailment.

Our proportional MWh sold in the year ended December 31, 2017 was 7,794,125 MWh, as compared to 6,806,272 MWh for the year ended December 31, 2016, representing an increase of 987,853 MWh, or 15%. This change in proportional MWh sold was primarily attributable to:

an increase in volume of 748,277 MWh from controlling interest in consolidated MWh primarily due to acquisitions in 2017 and favorable wind conditions partially offset by lower availability; and

an increase in volume of 239,576 MWh from unconsolidated investments due to the acquisition of Armow in the fourth quarter of 2016 and favorable wind conditions, partially offset by lower availability.

Our consolidated average realized electricity price was \$54 per MWh for the year ended December 31, 2017 as compared to \$55 per MWh for the year ended December 31, 2016. The decrease of \$1 per MWh was primarily due to an increase in volume of lower priced PPAs coupled with lower spot market pricing as a result of congestion in the Texas market.

Proportional average realized electricity price was \$66 per MWh for the year ended December 31, 2017 which remained unchanged from the year ended December 31, 2016.

Consolidated Results of Operations

The following table provides selected financial information for the periods presented (in millions, except percentages):

					L					,		
	Year	ene	ded De	ce	mber 3	1,	2018	vs. 201	7	2017	vs. 20	16
	2018		2017		2016		\$ Cha	n g⁄e Cl	nange	\$ Cha	af/geCh	ange
Total revenue	\$ 483		\$411		\$ 354		\$72	18	%	\$57	16	%
Total cost of revenue	419		348		304		71	20		44	14	
Total operating expenses	62		53		45		9	17		8	18	
Operating income	2		10		5		(8)	(80)	5	100	
Total other expense	39		80		48		(41)	(51)	32	67	
Net loss before income tax	(37)	(70)	(43)	33	(47)	(27)	63	
Income tax provision	32		12		9		20	167		3	33	
Net loss	(69)	(82)	(52)	13	(16)	(30)	58	
Net loss attributable to noncontrolling interests	(211)	(64)	(35)	(147)	230		(29)	83	
Net income (loss) attributable to Pattern Energy	\$ 142		\$ (18)	\$ (17)	\$160	(889)%	\$(1)	6	%

Year Ended December 31, 2018 Compared to Year Ended December 31, 2017 and

Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

Total Revenue

Total revenue for the year ended December 31, 2018 was \$483 million compared to \$411 million for the year ended December 31, 2017, an increase of \$72 million, or approximately 18%. The increase in total revenue for the year ended December 31, 2018 as compared to the prior year was primarily attributable to:

an increase in electricity sales due to a \$82 million increase in volume as a result of acquisitions in 2018 and 2017, partially offset by a \$12 million decrease in electricity sales attributable to the sale of El Arrayán, and a \$6 million increase in unrealized losses on our energy derivative; and

a \$6 million increase in other revenue, primarily due to a settlement for business interruption insurance for Santa Isabel.

Total revenue for the year ended December 31, 2017 was \$411 million compared to \$354 million for the year ended December 31, 2016, an increase of \$57 million, or approximately 16%. The change in total revenue for the year ended December 31, 2017 as compared to the prior year was primarily attributable to:

- a \$54 million increase in electricity sales driven by projects acquired in 2017;
- an \$18 million increase in electricity sales due to favorable wind availability and an increase in PPA contractual volumes for Amazon Wind; and
- a \$9 million decrease in unrealized loss on our energy derivative primarily due to lower forward natural gas price curves when compared to the prior period.

The increase in total revenues was partially offset by:

- a \$5 million decrease related to an interruption caused principally by a hurricane in Puerto Rico; and
- a \$16 million decrease driven by the presence of ERCOT market congestion.

Cost of revenue

Cost of revenue for the year ended December 31, 2018 was \$419 million compared to \$348 million for the year ended December 31, 2017, an increase of \$71 million, or approximately 20%. The increase in cost of revenue during 2018 as compared to 2017 was primarily attributable to:

- a \$7 million and a \$13 million increase in transmission costs and project expense, respectively, for costs associated with projects acquired in 2017 and 2018; and
- a \$51 million increase in depreciation, which is primarily attributable to \$26 million of accelerated depreciation related to our repowering project and \$23 million related to acquisitions completed in 2017 and 2018.

Cost of revenue for the year ended December 31, 2017 was \$348 million compared to \$304 million for the year ended December 31, 2016, an increase of \$44 million, or approximately 14%. The increase in cost of revenue during 2017 as compared to 2016 was primarily attributable to:

- a \$19 million and a \$12 million increase in transmission costs and project expense, respectively, for costs associated with projects acquired in 2017; and
- a \$24 million increase in depreciation, primarily due to projects acquired in 2017.

The increase in cost of revenue was partially offset by a \$10 million decrease primarily due to a decrease in turbine maintenance expense.

Operating expenses

Operating expenses for the year ended December 31, 2018 were \$62 million compared to \$53 million for the year ended December 31, 2017, an increase of \$9 million, or approximately 17%. The increase in operating expenses during 2018 as compared to 2017 was primarily attributable to a \$7 million impairment expense related to the sale of El Arrayán.

Operating expenses for the year ended December 31, 2017 were \$53 million compared to \$45 million for the year ended December 31, 2016, an increase of \$8 million, or approximately 18%. The increase in operating expenses during 2017 as compared to 2016 was primarily attributable to:

- a \$5 million increase in employee related costs primarily to support growth in employee headcount;
- a \$5 million net increase in professional fees and other general administration expense; and
 - a \$4 million increase in related party general and administrative

The increase in operating expense was partially offset by a \$7 million increase in related party reimbursement. Other expense

Other expense for the year ended December 31, 2018 was \$39 million compared to \$80 million for the year ended December 31, 2017, a decrease of \$41 million, or approximately 51%. The decrease was primarily attributable to:

- a \$70 million increase in net gain on transactions primarily as a result of the gain on sale of our minority interest in K2;
- a \$26 million increase in gain on derivatives primarily due to a \$23 million favorable impact from foreign currency exchange rates and a \$3 million favorable impact due to interest rate swaps; and
- a \$2 million decrease in the extinguishment of debt.

The decrease in other expense was partially offset by:

- a \$41 million decrease in equity in earnings of unconsolidated investments, net, which is primarily attributable to equity losses associated with our investment in Pattern Development;
- a \$11 million increase in other expense, net primarily related to a \$9 million increase in contingent liability accretion associated with acquisitions and a \$3 million sublease loss related to our former San Francisco office; and
- a \$7 million increase in interest expense primarily due to debt acquired in conjunction with acquisitions in 2017 and 2018.

Other expense for the year ended December 31, 2017 was \$80 million compared to \$48 million for the year ended December 31, 2016, an increase of \$32 million, or approximately 67%. The change in other expense during 2017 as compared to 2016 was primarily attributable to:

a \$24 million increase in interest expense primarily due to the issuance of unsecured senior notes in January 2017 and debt associated with our acquisitions in 2017;

- a \$9 million increase in early extinguishment loss associated with Ocotillo debt;
- a \$7 million increase in loss on derivatives primarily as a result of an unfavorable impact from foreign currency exchange rates and a realized loss due to the termination of the interest rate swaps; and
- a \$3 million increase in net losses on transactions and accretion expense primarily related to the acquisition of the Broadview Project.

The increase in other expense was partially offset by an \$11 million increase in equity in earnings in unconsolidated investments, net.

Income tax provision

We were subject to taxation in the United States, Chile, Canada and Japan.

The income tax provision was \$32 million for the year ended December 31, 2018 compared to \$12 million for the year ended December 31, 2017. The increase in the tax provision of \$20 million was primarily due to \$12 million in tax expense attributable to the gain recognized on the sale of K2 and earnings from our Canadian and Japanese operations. The income tax provision was \$12 million for the year ended December 31, 2017 compared to \$9 million for the the year ended December 31, 2016. The expense of \$12 million was principally related to our Canadian operations partially offset by a tax benefit earned from the intraperiod allocation rules that are applied when there is a pre-tax loss from continuing operations and pre-tax income from other categories in the year such as other comprehensive income (loss) and tax benefits earned in our Chilean operations.

Effective tax rate

Our effective tax rate was (87)% in 2018 compared to (17)% in 2017. Our effective tax rate differs from the statutory tax rate primarily due to adjustments for income in non-taxable entities allocable to noncontrolling interests, and foreign tax rate differential on pre-tax book income.

Net loss

Net loss was \$69 million for the year ended December 31, 2018, compared to \$82 million for the prior year, a decrease in net loss of \$13 million, or 16%. The decrease in net loss was primarily attributed to:

- a \$72 million increase in total revenue, as discussed above; and
- a \$41 million decrease in other expense primarily consisting of the gain on sale of our noncontrolling interest in K2, favorable foreign currency exchange rates, partially offset by increased contingent liability accretion, a decrease in equity in earnings of unconsolidated investments and an increase in interest expense.

The decrease in net loss was partially offset by:

- a \$71 million increase in cost of revenues primarily related to increased depreciation as a result of acquisitions and accelerated depreciation at our repowering project;
- a \$20 million increase in the tax provision; and
- a \$9 million increase in operating expenses primarily related to impairment expense at El Arrayán.

Net loss was \$82 million for the year ended December 31, 2017, compared to \$52 million for the prior year, an increase in loss of \$30 million, or 58%. The increase in net loss was primarily attributed to:

- a \$44 million increase in cost of revenues due primarily to acquisitions in 2017;
- a \$32 million increase in other expense primarily related to increases in interest expense, early extinguishment loss, 4 osses on derivatives due to unfavorable impacts from foreign currency exchange rates and the termination of the interest rate swaps;
- a \$8 million increase in operating expense, as discussed above; and
- a \$3 million increase in the tax provision.

The increase in net loss was partially offset by a \$57 million increase in total revenue, as discussed above. Noncontrolling interests

The net loss attributable to noncontrolling interests was \$211 million for the year ended December 31, 2018 compared to a \$64 million net loss attributable to noncontrolling interests for the year ended December 31, 2017. The increased loss of \$147 million, or approximately 230%, was primarily attributable to the Tax Cuts and Jobs Act ("the Tax Act") effective January 1, 2018 which resulted in significantly lower portions of the hypothetical liquidation proceeds to compensate certain noncontrolling interest investors for tax gains on the hypothetical sale calculated at the lowered corporate income tax rate of 21% compared to the rate of 35% previously utilized as a result of the Tax Act. As a result, for the year ended December 31, 2018, a \$150 million one-time adjustment is included in net loss attributable to noncontrolling interests as a result of the decrease in the federal corporate income tax rate.

The net loss attributable to noncontrolling interests was \$64 million for the year ended December 31, 2017 compared to a \$35 million net loss attributable to noncontrolling interests for the year ended December 31, 2016. The increased loss of \$29 million, or approximately 83%, was primarily attributable to allocations of losses for tax equity projects, including allocations related to projects acquired in 2017.

Liquidity and Capital Resources

Our business requires substantial liquidity to fund (i) equity investments in our construction projects, (ii) current operational costs, (iii) debt service payments, (iv) dividends to our stockholders, (v) potential investments in new acquisitions, (vi) modifications to our projects, (vii) unforeseen events and (viii) other business expenses. As a part of our liquidity strategy, we plan to retain a portion of our cash flows in above-average renewable resource years in order to have additional liquidity in below-average renewable resource years.

We intend to maintain a conservative approach to our capital structure to protect our ability to meet our financial obligations, pay our regular dividends and to fund investments for future growth. Power projects by their nature require significant capital investment, and as a result, we seek to protect our business through careful management of our capital structure.

The foundation of our capital structure is built on project finance arrangements intended to ensure risk segmentation across our large project portfolio, and our practice has been to structure our project finance arrangements comprised of a mix of debt, tax equity and equity to conform to investment grade-like credit standards. Specifically, we seek to structure our project finance arrangements to:

match assets with liabilities based on a project's off-take tenor and currency denomination;

fix or hedge project debt on a long-term basis;

amortize our third-party project finance capital within the tenor of the off-take arrangement; and apply conservative debt service coverage or tax equity structuring standards.

Our project capital structure is supplemented with a corporate capital layer that primarily relies on equity capital. Our corporate indebtedness is modest, and intended to ensure broad capital access. We seek to ensure financial flexibility and stability through our corporate revolving credit facility, maturity staging, minimization of interest rate exposure, and maintenance of our credit ratings. We intend to use our available liquidity strategically, with a priority placed on our available liquidity for committed project acquisitions or investment commitments. We believe this approach, together with a strategic consideration of project-level financial restructuring and recapitalization opportunities, will contribute to our ability to maintain and, over time, increase our cash available for distribution.

The following graph presents the components of our overall capital structure for the periods presented below (in millions):

Sources of Liquidity

Our sources of liquidity include cash generated by our operations, cash reserves, borrowings under our corporate and project-level credit agreements and further issuances of equity and debt securities.

The principal indicators of our liquidity are our unrestricted and restricted cash balances and availability under our revolving credit facilities and project level facilities. Our available liquidity is as follows (in millions):

December 31, 2018
Unrestricted cash \$ 101
Restricted cash 22
Revolving credit facilities availability(1) 205
Project level facilities:
Post construction use 175

Post construction use 175
Construction use 270
Total available liquidity \$ 773

(1) As of February 22, 2019, the amount available on the revolving credit facilities was \$152 million.

We believe that throughout 2019, we will have sufficient liquid assets, cash flows from operations, and borrowings available under our revolving credit facilities and construction facilities to meet our financial commitments, debt service obligations, and contingencies. However, to fund capital expenditures, including construction at Tsugaru, Gulf Wind repowering, project acquisitions and capital calls for Pattern Development over the next 24 months, we will likely be required to issue raise additional capital, including project level construction debt, corporate equity, debt or hybrid securities, or sell interests in our projects. Furthermore, our convertible notes will mature in July 2020 and will require a significant amount of capital and, as such, we have begun pursuing alternative financing arrangements to replace the maturing debt. However, we are subject to business and operational risks that could adversely affect our cash flow. A material decrease in our cash flows would likely produce a corresponding adverse effect on our borrowing capacity.

In connection with our future capital expenditures and other investments, including any project acquisitions that we may make, or capital calls from Pattern Development we elect to participate in, we may, from time to time, issue debt or equity securities. Our ability to access the debt and equity markets is dependent on, among other factors, the overall state of the debt and equity markets and investor appetite for investment in clean energy projects in general and our Class A shares in particular. Volatility in the market price of our Class A shares may prevent or limit our ability to utilize our equity securities as a source of capital to help fund acquisitions. An inability to obtain debt or equity financing on commercially reasonable terms could significantly limit our timing and ability to consummate future acquisitions, and to effectuate our growth strategy.

We have an equity distribution agreement (Equity Distribution Agreement). Pursuant to the terms of the Equity Distribution Agreement, we may offer and sell shares of our Class A common stock from time to time, up to an aggregate sales price of \$200 million. We intend to use the net proceeds from the sale of the shares for general corporate purposes, which may include the repayment of indebtedness and the funding of acquisitions and investments. For the year ended December 31, 2018, we did not sell any shares under the Equity Distribution Agreement. As of December 31, 2018, approximately \$144 million in aggregate offering price remained available to be sold under the agreement.

Cash Flows

We use traditional measures of cash flow, including net cash provided by operating activities, net cash used in investing activities and net cash provided by financing activities to evaluate our periodic cash flow results. Below is a summary of our cash flows for each period (in millions):

Vanr anded

i ear ended			
	December 31,		
	2018 2017	2016	
Net cash provided by operating activities	\$279 \$218	\$164	
Net cash used in investing activities	(373) (320)	(124)	
Net cash provided by (used in) financing activities	83 125	(77)	
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4) 6	_	
Net change in cash, cash equivalents and restricted cash	\$(15) \$29	\$(37)	

Net cash provided by operating activities

Net cash provided by operating activities was \$279 million for the year ended December 31, 2018 as compared to \$218 million in the prior year, an increase of \$61 million, or approximately 28%. The increase in cash provided by operating activities was primarily due to higher revenues of \$83 million (excluding unrealized loss on energy derivative and amortization of PPAs) primarily from projects which were acquired in 2018 and 2017 and \$34 million in advanced lease revenue. The increase to net cash provided by operating activities was partially offset by increases of \$13 million in project expenses primarily related to projects acquired in 2018, \$11 million in interest payments, \$15 million in payments for accounts payable and other accrued liabilities due primarily to the timing of payments, \$7 million in transmission costs primarily due to an acquisition in 2017 and a \$6 million decrease in distributions from unconsolidated investments.

Net cash provided by operating activities was \$218 million for the year ended December 31, 2017 as compared to \$164 million in the prior year, an increase of \$54 million, or approximately 33%. The increase in cash provided by operating activities was primarily due to higher revenues of \$49 million (excluding unrealized loss on energy derivative and amortization of PPAs) primarily from projects which were acquired in 2017 and increase of \$39 million in distributions from unconsolidated investments. These increases were partially offset by an increase of \$21 million in transmission and project expense, an increase of \$16 million in interest payments, an increase of \$7 million in operating expense and other changes in working capital as a result of the timing of receipts of payments and disbursements.

Net cash used in investing activities

Net cash used in investing activities was \$373 million for the year ended December 31, 2018, which consisted primarily of \$300 million in cash paid, net of cash and restricted cash acquired for acquisitions completed in 2018, \$181 million primarily for construction costs related to projects acquired in Japan, and an additional investment of \$115 million in Pattern Development, offset by \$214 million in proceeds from the sale of El Arrayán and sale of our interests in K2, net of cash sold and \$10 million in distributions received from our unconsolidated investments. Net cash used in investing activities was \$320 million for the year ended December 31, 2017, which consisted primarily of \$228 million in cash paid, net of cash and restricted cash acquired for acquisitions completed in 2017, \$69 million in cash invested in Pattern Development, \$44 million for capital expenditures, which primarily relates to payments for construction liabilities assumed with our acquisitions completed in 2017, partially offset by \$13 million in distributions from unconsolidated investments and \$8 million in reimbursement of interconnection costs. Net cash used in investing activities was \$124 million for the year ended December 31, 2016, which consisted primarily of \$136 million for the acquisition of a 50% interest in Armow, net of cash and restricted cash acquired, \$33 million for capital expenditures primarily related to payments made in 2016 for projects that became commercially operable in 2015 and capital expenditures incurred in 2015 and leasehold improvements and furniture and fixtures, partially offset by \$42 million in distributions from unconsolidated investments.

Net cash provided by (used in) financing activities

Net cash provided by financing activities for the year ended December 31, 2018 was \$83 million. Net cash provided by financing activities consisted primarily of the following:

- \$788 million in proceeds from debt and revolving credit facilities; and
- \$98 million in contributions from noncontrolling interest.

Net cash provided by financing activities was partially offset by:

- \$588 million in repayments of debt and revolving credit facilities;
- \$165 million of dividend payments;
- \$38 million in distributions to noncontrolling interests; and
- \$9 million in payments for deferred financing costs primarily associated with the issuance of debt associated with Tsugaru Holdings.

Net cash provided by financing activities for the year ended December 31, 2017 was \$125 million. Net cash provided by financing activities consisted primarily of the following:

- \$694 million in net proceeds from the issuance of long-term debt;
- \$237 million in net proceeds from equity issuances, net of expenses;

\$333 million in draws on the corporate revolving credit facility; and

\$58 million in proceeds from the partial sale of Panhandle 2.

Net cash provided by financing activities were partially offset by:

\$513 million in repayments of the corporate revolving credit facility;

\$483 million in repayment of long-term debt;

\$145 million in dividend payments;

\$20 million in distributions to noncontrolling interests;

\$16 million in financing fee payments; and

\$14 million in termination of designated derivatives payment.

Net cash used in financing activities for the year ended December 31, 2016 was \$77 million. Net cash used in financing activities consisted primarily of the following:

\$350 million in repayments of the corporate revolving credit facility;

\$120 million in dividend payments;

\$48 million in repayment of long-term debt; and

\$18 million in distributions to noncontrolling interests.

Net cash used in financing activities were partially offset by:

\$286 million in net proceeds from equity issuances, net of expenses; and

\$175 million in draws on the corporate revolving credit facility.

Uses of Liquidity

Cash Dividends to Investors

We intend to pay regular quarterly dividends in U.S. dollars to holders of our Class A common stock. On February 22, 2019, we maintained our dividend at \$0.4220 per Class A share, or \$1.688 per Class A share on an annualized basis, commencing with respect to dividends to be paid on April 30, 2019 to holders of record on March 29, 2019. Cash paid for dividends for the year ended December 31, 2018 was \$165 million.

We expect to pay a quarterly dividend on or about the 30th day following each fiscal quarter to holders of record of our Class A common stock on the last day of such quarter.

Capital Expenditures and Investments

In 2018, total cash used for capital expenditures was \$181 million. We do not include capital expenditures at our projects held at our unconsolidated equity investments. Cash paid for acquisitions and capital to Pattern Development was \$415 million.

We expect to make investments in additional projects in 2019 and provide further capital to Pattern Development. Additionally, we expect to incur approximately \$280 million in 2019 related to the construction of Tsugaru and repowering at our Gulf Wind project; however, depending on construction milestones, the timing of these expenditures may change. We estimate as of December 31, 2018 remaining budgeted construction cost for Tsugaru and the repowering at Gulf Wind are approximately \$471 million, of which approximately \$339 million is included in the "Contractual Obligations" table below. In addition, for the year ending December 31, 2019, we have budgeted an additional \$20 million for other expansion capital expenditures.

We also evaluate, from time to time, third-party acquisition opportunities. We believe that we will have sufficient cash and capacity from revolving credit facilities and construction loans to complete the funding of future commitments, but this may be affected by any other acquisitions or investments that we make. To the extent that we make any such investments or acquisitions, we will evaluate capital markets and other corporate financing sources available to us at the time. In addition, we will make investments, from time to time, at our operating projects. Operational capital expenditures are those capital expenditures required to maintain our long-term operating capacity. Capital expenditures for the projects are generally made at the project level using project cash flows and project reserves,

although funding for major capital expenditures may be provided by additional project debt or equity. Therefore, the distributions that we receive from the projects may be made net of certain capital expenditures needed at the projects. Contractual Obligations

We have a variety of contractual obligations and other commercial commitments that represent prospective cash requirements. See also Note 10, Debt, and Note 19, Commitments and Contingencies, in the notes to consolidated financial statements for additional discussion of contractual obligations.

The following table summarizes estimates of future commitments related to the various agreements that we have entered into as of December 31, 2018 (in millions):

		Less			More	
_	Contractual Obligations	Than	1-3	3-5	Than	Total
	Contractual Obligations	1	Years	Years	5	Total
Y		Year			Years	
	Corporate revolving credit facility	\$198	\$ <i>-</i>	\$ <i>—</i>	\$ —	\$198
	Corporate-level debt principal payments		225		350	575
	Corporate-level interest payments on debt instruments	30	52	43	12	137
	Project-level debt principal payments	58	136	227	1,121	1,542
	Project-level interest payments on debt instruments	55	106	96	257	514
	Transmission service agreements	24	48	48	495	615
	Operating leases	22	43	43	352	460
	Service and maintenance agreements	32	60	53	68	213
	Construction and other commitments	192	159	6	34	391
	Asset retirement obligations	24			185	209
	Total	\$635	\$829	\$ 516	\$2,874	\$4,854

Credit Agreements for Equity Method Investments

Below is a summary of our proportion of debt in unconsolidated investments, as of December 31, 2018 (in millions):

	Total	Percentage of Ownership		_e Our Portion of		Ī
	Entity			Unconsolidated		ed
	Debt			Entity Debt		
South Kent	\$432	50	%	\$	216	
Grand	247	45	%	111	1	
Armow	359	50	%	180)	
Pattern Development	216	29	%	63		
Unconsolidated investments - deb	st \$1,254			\$	570	

Off-Balance Sheet Arrangements

As of December 31, 2018, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K.

Covenants, Distribution Conditions and Events of Default

Corporate-Level Debt

Corporate Revolving Credit Facility

Our corporate revolving credit facility has customary covenants, prepayment provisions and events of default. The most restrictive of such provisions is the maintenance coverage ratio that requires the subsidiary borrowers to maintain a leverage ratio (the ratio of borrower debt to borrower cash flow) that does not exceed 5.50:1.00 and an interest coverage ratio (the ratio of borrower cash flow to borrower interest expense) that is not less than 1.75:1.00. In addition, certain of our subsidiaries are subject to usual and customary affirmative and negative covenants under our corporate revolving credit facility. Specifically, with limited exceptions, such subsidiaries are prohibited from distributing funds to us unless

the following conditions are met: (i) no event of default under the corporate credit facility has occurred and is continuing or would be caused by such distribution and (ii) the corporate credit facility borrowers are in compliance with the leverage ratio test and the interest coverage ratio test, both before and after giving effect to such distribution. As of December 31, 2018, we were in compliance with all covenants contained in our corporate revolving credit facility.

Convertible Notes

The indenture for the convertible notes contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the trustee or the holders of not less than 25% in aggregate principal amount of the convertible notes then outstanding may declare the unpaid principal of the convertible notes and accrued and unpaid interest, if any, thereon immediately due and payable. In the case of certain events of bankruptcy, insolvency or reorganization relating to us, the principal amount of the convertible notes together with accrued and unpaid interest, if any, thereon will automatically become and be immediately due and payable.

Unsecured Senior Notes

Under the unsecured senior notes issued in January 2017, we have agreed to certain restrictions on our or the subsidiary guarantor's ability to incur secured debt and our ability to consolidate, merge or sell all or substantially all of our assets. These covenants are subject to a number of important limitations and exceptions.

Consolidated Project-Level Debt and Unconsolidated Investments Project-Level Debt

Under the respective credit agreements for each of Hatchet Ridge, St. Joseph, Santa Isabel, Ocotillo, Western Interconnect and Meikle, MSM, Tsugaru, Futtsu, and Ohorayama, our projects are subject to certain covenants, events of default and distribution conditions. In addition, the respective credit agreements for each of our unconsolidated investments South Kent, Grand, and Armow contain certain covenants, events of default and distribution conditions. While terms may vary between the individual credit agreements, the most significant and restrictive include restrictions on the project's ability to incur debt, grant liens, sell or lease assets, transfer equity interests, dissolve, pay distributions and change its business.

In general, the distribution conditions included in the credit agreements are as follows:

to the extent the project has letter of credit facilities under the project debt, there are no letter of credit loans outstanding;

to the extent the project has reserve requirements, accounts are fully funded;

any mandatory prepayment required has been made;

no default has occurred and such distribution will not result in an event of default; and

the applicable project has met its debt service coverage ratio.

Revolving Japan Credit Facility Equity Back-Leverage Facility

GPG is party to a revolving credit facility that has customary covenants, prepayment provisions and events of default. The most restrictive of such provisions is to maintain a leverage ratio (the ratio of borrower debt to borrower cash flow) that does not exceed 5.00:1.00 and an interest coverage ratio (the ratio of borrower cash flow to borrower interest expense) that is not less than 3.00:1.00.

Tsugaru Holdings is party to a back-leverage credit facility that has customary covenants, prepayment provisions and events of default. The most restrictive of such provisions is a restriction on distributions outside of the company until the loan has been fully repaid.

Distributions from Unconsolidated Investments

In general, distributions result from excess cash flows from our unconsolidated investments, which represent revenues received from the sale of electricity, as reduced by operating expenses, interest and principal payments on project level debt provided that specified distribution requirements are met under the project loan agreement. Project financing arrangements typically limit the timing of such distributions from the project entity to the same frequency as the scheduled principal and interest payments made by such project entity, which is usually on a quarterly basis although some financing arrangements instead call for monthly or semiannual payments. Distributions from our unconsolidated investments may be affected by the underlying performance of each project entity, and significant underperformance of the project could result in distributions not being made for some period of time. Overall, however, we expect that we will receive distributions throughout the term of the project's PPA.

Tax Equity Partnership

Generally, tax equity partnerships have specific commercial terms that dictate distributions of cash and allocation of tax items among the partners, who are divided into one of two categories: tax equity and cash investor. A disproportionate share of income and cash is given to tax equity in order for them to achieve a target after-tax yield or "flip" near year 10 of project operations. The target yield and flip term vary by agreement and are dependent on project performance. Prior to the flip, tax items (income, PTCs) are commonly allocated 99% to the tax equity. On the other hand, distributable cash is divided among the partners in percentages that do not match the tax items. Cash distribution percentages can be temporarily increased for tax equity in the event that certain cumulative distribution thresholds are not achieved. This has occurred for certain projects 2018 and may occur for additional projects in 2019. Once tax equity reaches their target yield, the allocations and distributions "flip" to different amounts. After the flip, income and cash are typically allocated 5% to the tax equity and 95% to the cash investor. REC sales are often specially addressed in each agreement with most of the cash and income directed to the cash investor both pre and post-flip. Tax equity partnership imposes a range of affirmative and negative covenants that are similar to what a term lender would require, such as, financial reporting, insurance maintenance and prudent operator standards. Most of these restrictions end once the flip point occurs and any deficit restoration obligation of the tax equity has been eliminated. There are also covenants that specifically seek to preserve the tax attributes of the project that are not customary for project term lenders.

If tax equity suffers any losses or damages as the result of a breach of representation, covenant, or other obligation by the cash investor in its capacity as managing member, tax equity may provide notice to the cash investor and require that any distributions otherwise required to be paid to the cash investor shall, instead, be paid to tax equity to cover any damages.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based on our consolidated historical financial statements that are included elsewhere in this Form 10-K, which have been prepared in accordance with U.S. GAAP. In applying the critical accounting policies set forth below, our management uses its judgment to determine the appropriate assumptions to be used in making certain estimates. These estimates are based on management's experience, the terms of existing contracts, management's observance of trends in the renewable energy industry, information provided by our power purchasers and information available to management from other outside sources, as appropriate. These estimates are subject to an inherent degree of uncertainty.

We use estimates, assumptions and judgments for certain items, including the calculation of our acquisitions, noncontrolling interest balances, and derivatives. These estimates, assumptions and judgments are derived and continually evaluated based on available information, experience and various assumptions we believe to be reasonable under the circumstances. To the extent these estimates are materially incorrect and need to be revised, our operating results may be materially adversely affected.

Acquisitions

Accounting Standards Update (ASU) 2017-01, Clarifying the Definition of a Business (ASU 2017-01) provides a screen to determine when a set of assets and activities should not be considered a business. Under ASU 2017-01, we perform an initial screening test that, if met, results in the conclusion that the set is not a business. If the initial screening test is not met, we evaluate whether the set is a business based on whether there are inputs and a substantive process in place. The definition of a business impacts whether we consolidate an acquisition under business combination guidance or asset acquisition guidance. When the acquisition is recognized as an equity method investment, the definition of a business impacts whether equity method goodwill can be recognized.

Business Combinations, Asset Acquisitions, and Equity Method Investments

When we acquire a controlling interest in an entity deemed to be a business, the purchase is accounted for using the acquisition method, and the fair value of the purchase consideration is allocated to the tangible and intangible assets acquired and the liabilities assumed based on their estimated fair values. Contingent consideration, if any exists, is also recognized and measured at fair value as of the acquisition date. The excess, if any, of the fair value of the purchase consideration over the fair values of the identifiable net assets is recorded as goodwill. Conversely, the excess, if any, of the net fair value of the identifiable net assets over the fair value of the purchase consideration is recorded as a gain. Transaction costs associated with business combinations are expensed as incurred.

When we acquire assets and liabilities that do not constitute a business or a variable interest entity (VIE) of which we are the primary beneficiary, the fair value of the purchase consideration, including transaction costs of the asset acquisition, is assumed to be equal to the fair value of the net assets acquired. The purchase consideration, including the transaction costs, is allocated to the individual assets and

liabilities assumed based on their relative fair values. Contingent consideration associated with the acquisition is generally recognized only when the contingency is resolved. No goodwill is recognized in an asset acquisition. When we acquire assets and liabilities that do not constitute a business but meet the definition of a VIE of which we are the primary beneficiary, the purchase is accounted for using the acquisition method described above for business combination, except that no goodwill is recognized. To the extent that there is difference between the purchase consideration and the VIE's identifiable assets and liabilities recorded and measured at fair value, the difference is recognized as a gain or loss.

When we acquire a noncontrolling interest in an entity where we are not the primary beneficiary, do not control any of the ongoing activities of the entity, and do not meet consolidation requirements of Accounting Standards Codification (ASC) 810, Consolidation, and ASU 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis, the investment is initially recognized as an equity method investment at cost. Any difference between the cost of an investment and the amount of underlying equity in net assets of an investee are considered basis differences. Basis difference related to the property, plant and equipment are amortized over the estimated economic useful life of the underlying long-lived assets, while basis difference related to the PPA are amortized over the remaining term of the PPA. Transaction costs associated with equity method investments are included in the investment. Additionally, if the projects in which we hold these investments recognize an impairment under the provisions of ASC 360, Property, Plant and Equipment, we would record our impairment loss and would evaluate our investment for an other than temporary decline in value under ASC 323, Investments—Equity Method and Joint Ventures. Significant judgment is required in determining the acquisition date fair value of the assets acquired and liabilities assumed using either an income, market, or cost-based valuation method. The valuations require management to make significant estimates and assumptions. These estimates and assumptions are inherently uncertain, and as a result, actual results may differ from estimates. Significant estimates include, but are not limited to, revenue and operating expense growth, future expected cash flows, and discount rates.

For business combinations, during the measurement period, which is one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

The allocation of the purchase price directly affects the following items in our consolidated financial statements:

The amount of purchase price allocated to the various tangible and intangible assets, liabilities and noncontrolling interests on our consolidated balance sheets:

The amounts of purchase price allocated to the value of above-market and below-market power purchase agreement, which is subsequently amortized to electricity sales over the remaining terms of each respective arrangement; and The period of time over which tangible and intangible assets are depreciated or amortized varies, and thus, changes in the amounts allocated to these assets will have a direct impact on our results of operations.

Noncontrolling Interests

Noncontrolling interests represent the portion of our net income (loss), net assets and comprehensive income (loss) that is not allocable to us and is calculated based on our ownership percentage, for certain projects.

For those projects where economic benefits are not allocated based on pro rata ownership percentage, we have determined that the appropriate methodology for calculating the noncontrolling interest balances that reflects the substantive economic arrangements in the operating agreements is a balance sheet approach using the hypothetical liquidation at book value (HLBV) method.

Under the HLBV method, the amounts reported as noncontrolling interests in the consolidated balance sheets represent the amounts third-party investors would hypothetically receive at each balance sheet reporting date under the liquidation provisions of the operating partnership agreements, assuming the net assets of our projects were liquidated at amounts determined in accordance with U.S. GAAP and distributed to the investors. Therefore, the noncontrolling interest balances in these projects are reported as a component of equity in the consolidated balance sheets.

The third-party interests in the results of operations for those projects using HLBV is determined as the difference in noncontrolling interests in the consolidated balance sheets at the start and end of each reporting period, after taking into account any capital transactions between our projects and the third-party investors.

Factors used in the HLBV calculation include U.S. GAAP income, taxable income, capital contributions, production tax credits, and distributions, and the stipulated targeted equity investor return specified in the projects' operating agreements.

Changes in these factors could have a significant impact on the amounts that investors would receive upon a hypothetical liquidation. The use of the HLBV methodology to allocate income to the noncontrolling interest holders may create volatility in our consolidated statements of operations as the application of HLBV can drive changes in net income or loss attributable to noncontrolling interests from quarter to quarter.

Derivatives

We enter into derivative transactions primarily for the purpose of reducing exposure to fluctuations in interest rates, foreign currency exchange rates and electricity prices. We have entered into interest rate swap agreements and have designated certain of these derivatives as cash flow hedges of expected interest payments on variable rate debt. We also enter into foreign exchange currency transactions to hedge the distributions in Canadian dollars and Japanese yen from our operational Canadian and Japanese project entities. These foreign exchange currency derivatives currently do not qualify for hedge accounting. We may also enter into interest rate caps. Currently, we do not hold interest rate cap arrangements. Furthermore, we have energy derivative agreements that do not qualify for hedge accounting. We recognize our derivative instruments at fair value in the consolidated balance sheets, unless the derivative instruments qualify for the normal purchase normal sale (NPNS) scope exception to derivative accounting. Accounting for changes in the fair value of a derivative instrument depends on whether the derivative instrument has been designated as part of a hedging relationship and on the type of hedging relationship.

For derivative instruments that are designated as cash flow hedges, the change in unrealized losses on cash flow hedges, net of tax is reported as a component of other comprehensive income (loss). Changes in the fair value of these derivatives are subsequently reclassified into earnings in the period that the hedged transaction affects earnings. The ineffective portion of change, if any, in fair value is recorded as a component of net income (loss) on the consolidated statements of operations. The change in fair value for undesignated derivative instruments is reported as a component of net income (loss) on the consolidated statements of operations. Certain of our energy derivative agreements qualify for the NPNS scope exception and therefore are not accounted for as derivatives.

Energy prices are subject to wide swings as supply and demand are impacted by, among many other unpredictable items, weather, market liquidity, generating facility availability, customer usage, storage, and transmission and transportation constraints. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon fluctuations in interest rates. Also, foreign currency exchange rates are subject to fluctuations in market movements and can be impacted by, among other factors, economic conditions, inflation rate, political stability and public debt. We do not hedge all of our commodity price, foreign currency exchange rate and interest rate risks, thereby exposing the unhedged portion to changes in market prices.

Market price quotations for certain electricity and natural gas trading hubs related to energy derivative agreements are not as readily obtainable due to the lengths of the contracts. Given that limited market data exists for these contracts, as well as for those contracts that are not actively traded, we use forward price curves derived from third-party models based on perceived pricing relationships to major trading hubs that are based on unobservable inputs. The estimated fair value of energy derivative agreements is a function of underlying forward energy prices, related volatility, counterparty creditworthiness, and duration of the contracts. The assumptions used in the valuation models are critical and any changes in assumptions could have a significant impact on the estimated fair value of the contract. Income Taxes

We are subject to income taxes in the U.S. (federal and state) and numerous foreign jurisdictions. Tax laws, regulations, and administrative practices in various jurisdictions may be subject to significant change, with or without notice, due to economic, political, and other conditions, and significant judgment is required in evaluating and estimating our provision and accruals for these taxes. There are transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. Our effective tax rates could be affected by numerous factors, such as intercompany transactions, the relative amount of our foreign earnings, the applicability of special tax regimes, losses incurred in jurisdictions for which we may not be able to realize the related tax benefit, changes in foreign currency exchange rates, acquisitions (including integrations) and investments and how they are financed, changes in our deferred tax assets and liabilities and their valuation, and changes in laws, regulations, administrative

practices and interpretations related to tax and accounting.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

We have significant exposure to commodity prices, interest rates and foreign currency exchange rates, as described below. To mitigate these market risks, we have entered into multiple derivatives. We have not applied hedge accounting treatment to all of our derivatives, therefore we are required to mark some of our derivatives to market through earnings on a periodic basis, which will result in non-cash adjustments to our earnings and may result in volatility in our earnings, in addition to potential cash settlements for any losses.

Commodity Price Risk

We manage our commodity price risk for electricity sales primarily through the use of fixed price long-term power purchase agreements with creditworthy counterparties. Our financial results reflect approximately 524,827 MWh of electricity sales in the year ended December 31, 2018 that were subject to spot market pricing. A hypothetical increase or decrease of 10% or \$2.39 per MWh in the merchant market prices would have increased or decreased revenue by \$1 million for the year ended December 31, 2018.

In addition to the risks we face in broad commodity markets, many of our projects, especially in ERCOT, also face project-specific risks related to transmission system limitations which can result in local prices that are lower than the broader market prices (congestion). In the case of adverse congestion, our revenues are negatively impacted, and our financial hedges do not protect us from these impacts, since under those contracts, this risk is fully allocated to our projects and not to the counterparty (e.g. we sell our power at the lower local price, but still have to buy power for the counterparty at the higher broad market or hub price). In the past, these impacts have been material to our economic results, and we expect that congestion will continue to be a material risk in the future.

Interest Rate Risk

As of December 31, 2018, our long-term debt includes both fixed and variable rate debt. As long-term debt is not carried at fair value on the consolidated balance sheets, changes in fair value would impact earnings and cash flows only if we were to reacquire all or a portion of these instruments prior to their maturity. The fair market value of our outstanding convertible senior notes, or "debentures," is subject to interest rate risk, market price risk and other factors due to the convertible feature of the debentures. The fair market value of the debentures will generally increase as interest rates fall and decrease as interest rates rise. In addition, the fair market value of the debentures will generally increase as the market price of our Class A common stock increases and decrease as the market price of our Class A common stock falls. The interest and market value changes affect the fair market value of the debentures, but do not impact our financial position, cash flows or results of operations due to the fixed nature of the debt obligations, except to the extent that changes in the fair value of the debentures or value of Class A common stock permit the holders of the debentures to convert into shares. As of December 31, 2018, the estimated fair value of our debt was \$2.2 billion and the carrying value of our debt was \$2.3 billion. The fair value of variable interest rate long-term debt is approximated by its carrying cost. A hypothetical increase or decrease in market interest rates by 1% would have resulted in a \$46 million decrease or \$50 million increase in the fair value of our fixed rate debt.

We are exposed to fluctuations in interest rate risk as a result of our variable rate debt and outstanding amounts due under our revolving credit facilities. As of December 31, 2018, \$223 million was outstanding under our revolving credit facilities. A hypothetical increase or decrease in interest rates by 1% would have a \$2 million impact on interest expense for the year ended 2018.

We may use a variety of derivative instruments, with respect to our variable rate debt, to manage our exposure to fluctuations in interest rates, including interest rate swaps and interest rate caps. As a result, our interest rate risk is limited to the unhedged portion of the variable rate debt. As of December 31, 2018, the unhedged portion of our variable rate debt was \$250 million. A hypothetical increase or decrease in interest rates by 1% would have a \$3 million impact to interest expense for the year ended December 31, 2018.

Foreign Currency Exchange Rate Risk

Our wind power projects are located in the United States, Canada and Japan. As a result, our financial results could be significantly affected by factors such as changes in foreign currency exchange rates or weak economic conditions in the foreign markets in which we operate. When the U.S. dollar strengthens against foreign currencies, the relative value in revenue earned in the respective foreign currency decreases. When the U.S. dollar weakens against foreign currencies, the relative value in revenue earned in the respective foreign currency increases. A majority of our power sale agreements and operating expenditures are transacted in U.S. dollars, with a growing portion transacted in

currencies other than the U.S. dollar, primarily the Canadian dollar. For the year ended December 31, 2018, our financial results included C\$130 million and ¥234 million of net income, from our Canadian and Japanese operations, respectively. A hypothetical increase or decrease of 10% in exchange rates between the Canadian and U.S. dollar would have increased or decreased net earnings of our Canadian and Japanese operations by \$10 million and \$6 million for the years ended December 31, 2018 and 2017, respectively.

We have established a currency risk management program. The objective of the program is to mitigate the foreign exchange rate risk arising from transactions or cash flows that have a direct or underlying exposure in non-U.S. dollar denominated currencies in order to reduce volatility in our cash flow, which may have an adverse impact to our short-term liquidity or financial condition. For the year ended December 31, 2018, we recognized a gain on foreign currency forward contracts of \$17 million in gain (loss) on derivatives in the consolidated statements of operations due to the strengthening of the U.S. dollar.

As of December 31, 2018, a 10% devaluation in the Canadian dollar and Japanese yen to the United States dollar would result in our consolidated balance sheets being negatively impacted by a \$39 million cumulative translation adjustment in accumulated other comprehensive loss.

Item 8. Financial Statements and Supplementary Data.

The financial statements and schedules are listed in Part IV, Item 15 of this Form 10-K, beginning at page F-1, Index to Consolidated Financial Statements, and are incorporated by reference herein.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (Exchange Act), as of the end of the period covered by this Form 10-K. Based on this evaluation, our chief executive officer and chief financial officer concluded that, as of December 31, 2018, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Inherent Limitations Over Disclosure Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. Management conducted an assessment of the effectiveness of our internal control over financial reporting based on the criteria set forth in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework).

Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2018. Our independent registered public accounting firm, PricewaterhouseCoopers LLP, has issued an audit report on our internal control over financial reporting, which appears herein.

Changes in Internal Control Over Financial Reporting

Management continuously reviews internal control over financial reporting, and accordingly may, from time to time, make changes aimed at enhancing their effectiveness to ensure that its systems evolve with its business. There were no changes in our internal control over

financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting.

Item 9B. Other Information. See Item 10 and Item 11.

PART III

Certain information required by Part III is omitted from this Form 10-K because the registrant will file with the U.S. Securities and Exchange Commission a definitive proxy statement pursuant to Regulation 14A in connection with the solicitation of proxies for the Company's Annual Meeting of Stockholders, or the 2019 Proxy Statement, within 120 days after the end of the fiscal year covered by this Form 10-K, and certain information included therein is incorporated herein by reference.

Item 10. Directors, Executive Officers and Corporate Governance.

Effective April 1, 2019, the following officer transitions will occur:

- (1) Mr. Michael J. Lyon who currently serves as the chief financial officer will transition to the role of president of the Company;
- Mr. Esben W. Pedersen who currently serves as the chief investment officer (and is a named executive officer) will (2) transition to the role of chief financial officer of the Company where, in such role, he would also continue to perform his current responsibilities as chief investment officer; and
- (3) Mr. Michael M. Garland who currently serves as both the chief executive officer and president will continue to serve in the role of chief executive officer of the Company.

In connection with the transition for Mr. Lyon discussed above, under the executive compensation plan for fiscal 2019, the 2019 total direct compensation target (which consists of base salary and incentive compensation in the form of cash incentive and equity incentives) for Mr. Lyon was increased by \$100,000 to \$1,238,000, with all of such increase to be paid (if at all) in the form of incentive compensation. In addition, the allocation of incentive compensation between cash incentive and equity incentive for Mr. Lyon under the executive compensation plan for fiscal 2019 was changed from 50-70% to 60-80% as equity incentive. Mr. Garland's allocation of incentive compensation between cash incentive and equity incentive under the executive compensation plan for fiscal 2019 was also changed from 60-80% to 70-90% as equity incentive.

Background information with respect to each of Mr. Garland, Mr. Lyon, and Mr. Pedersen called for by Items 401(b), (d), (e) and Item 404(a) of Regulation S-K has previously been provided in our 2018 Proxy Statement filed with the Securities and Exchange Commission and is incorporated by reference herein.

In addition, as a result of additional responsibilities undertaken by Mr. Hunter H. Armistead, executive vice president, business development and a named executive officer, with respect to project development, under the executive compensation plan for fiscal 2019, the 2019 total direct compensation target (which consists of base salary and incentive compensation in the form of cash incentive and equity incentives) for Mr. Armistead was increased by \$100,000 to \$1,521,000, with all of such increase to be paid (if at all) in the form of incentive compensation. In addition, the allocation of incentive compensation between cash incentive and equity incentive for Mr. Armistead under the executive compensation plan for fiscal 2019 was changed from 50-70% to 60-80% as equity incentive. Other than as set forth above, or has been previously disclosed there are no material plans, contracts or arrangements, or material amendments to such plans, contracts, arrangements in connection with the officer transitions discussed above or to other named executive officers.

The other information required under this Item 10 is incorporated by reference to our 2019 Proxy Statement. Item 11. Executive Compensation.

See above discussion under Item 10 "Directors, Executive Officers, and Corporate Governance." The other information required under this Item 11 is incorporated by reference to our 2019 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required under this Item 12 is incorporated by reference to our 2019 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required under this Item 13 is incorporated by reference to our 2019 Proxy Statement. Item 14. Principal Accounting Fees and Services.

The information required under this Item 14 is incorporated by reference to our 2019 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedule.

- (a) Documents filed as part of this report
- (1) Consolidated financial statements—Pattern Energy Group Inc.

Report of Independent Registered Public Accounting Firm Consolidated Balance Sheets as of December 31, 2018 and December 31, 2017 Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016 Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016	F-2 F-4 F-5 F-6
Consolidated Statement of Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016 Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016 Notes to Consolidated Financial Statements	<u>F-7</u> <u>F-8</u> <u>F-10</u>
Financial statements—Equity Method Investments a) South Kent Wind LP Financial Statements as of December 31, 2018 (unaudited) and December 31, 2018 and for the years ended December 31, 2018 (unaudited), 2017 and 2016	17. <u>S-1</u>
b) Grand Renewable Wind LP Financial Statements as of December 31, 2018 (unaudited) and December 31, 2017, and for the years ended December 31, 2018 (unaudited), 2017 and 2016	<u>S-20</u>
c) SP Armow Wind Ontario LP Financial Statements as of December 31, 2018 (unaudited) and December 31, 2017, and for the years ended December 31, 2018 (unaudited), 2017 and 2016	<u>S-40</u>
d) K2 Wind Ontario LP Financial Statements as of December 31, 2017, and for the period January 1, 2015 to December 30, 2018 (unaudited) and for the years ended December 31, 2017 and 2016	8 <u>S-59</u>
e) Pattern Energy Group 2 LP Financial Statements as of December 31, 2018 (unaudited) and December 31, 2017, and for the year ended December 31, 2018 (unaudited) and for the period from July 27, 2017 to December 31, 2017 (1)	
(2) Financial statements Schedule—Pattern Energy Group Inc. Parent Schedule I - Condensed Parent Company Financial Statements as of December 31, 2018 and December 3 2017, and for the years ended December 31, 2018, 2017, 2016	<u>1.</u> <u>S-77</u>

(3) Exhibits

 $^{(1)}$ To be filed by amendment to this Annual Report on Form 10-K by March 31, 2019 as permitted by Item 3-09(b)(1) of Regulation S-K.

The following documents are filed or furnished as part of this Form 10-K. The Company will furnish a copy of any exhibit listed to requesting stockholders upon payment of the Company's reasonable expenses in furnishing those materials.

Exhibit No. Description Of Exhibits

- Amended and Restated Certificate of Incorporation of Pattern Energy Group Inc. (Incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1/A dated September 20, 2013 (Registration No. 333-190538)).
- Amended and Restated Bylaws of Pattern Energy Group Inc. (Incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1/A dated September 3, 2013 (Registration No. 333-190538)).
- 4.1 Form of Class A Stock Certificate (Incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1/A dated September 3, 2013 (Registration No. 333-190538)).
- 4.2 Form of Senior Indenture (Incorporated by reference to Exhibit 4.3 to the Company's Registration Statement on Form S-3 dated August 14, 2017 (Registration No. 333-219970)).
- 4.3 Form of Subordinated Indenture (Incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-3 dated August 14, 2017 (Registration No. 333-219970)).
- Indenture, dated July 28, 2015, among Pattern Energy Group Inc., as issuer, Pattern US Finance

 Company LLC, as subsidiary guarantor, and Deutsche Bank Trust Company Americas, as trustee, related to 4.00% Convertible Senior Notes due 2020 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated July 28, 2015).
- Indenture, dated as of January 25, 2017, among Pattern Energy Group Inc., Pattern US Finance Company

 LLC, as guarantor, and Deutsche Bank Trust Company Americas, as trustee, related to 5.875% Senior

 Notes due 2024 (Incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated January 20, 2017).
- Second Amended and Restated Credit and Guaranty Agreement, among Pattern US Finance Company LLC, Pattern Canada Finance Company ULC, as borrowers, certain subsidiaries of the borrowers, the lenders party thereto from time to time, Royal Bank of Canada, as Swingline Lender, Administrative Agent and Collateral Agent, Bank of Montreal, as Syndication Agent, Royal Bank of Canada, Bank of Montreal, Morgan Stanley Bank, N.A., Citibank N.A. and Bank of America, N.A. each as LC Issuing Bank, and Citibank, N.A. as Documentation Agent, dated as of November 21, 2017 (the "Amended and Restated Credit and Guaranty Agreement") (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated November 22, 2017).
- Pattern Energy Group Inc. Amended and Restated 2013 Equity Incentive Award Plan (Incorporated by reference to Exhibit B to the Company's Definitive Proxy Statement on Schedule 14A dated April 14, 2017).
- Form of Pattern Energy Group Inc. 2013 Incentive Bonus Plan. (Incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-1/A dated September 3, 2013 (Registration No. 333-190538)).

Form of Stock Option Agreement under 2013 Equity Incentive Award Plan (Incorporated by reference to Exhibit 10.4 to the Company's Registration Statement on Form S-1/A dated September 3, 2013

	(Registration No. 333-190538)).
10.5	Form of Restricted Stock Agreement under 2013 Equity Incentive Award Plan. (Incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018).
10.6	Form of Restricted Stock Unit Agreement under 2013 Equity Incentive Award Plan. (Incorporated by reference to Exhibit 10.6 to the Company's Registration Statement on Form S-1/A dated September 3, 2013 (Registration No. 333-190538)).
10.7	Form of Deferred Restricted Stock Unit Agreement under 2013 Equity Incentive Award Plan. (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated November 22, 2017).
10.8	Form of TSR Performance Restricted Stock Agreement under 2013 Equity Incentive Award Plan (Incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the period ended March 31, 2018).
10.9	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors. (Incorporated by reference to Exhibit 10.7 to the Company's Registration Statement on Form S-1/A dated September 3, 2013 (Registration No. 333-190538)).
10.10	Registration Rights Agreement between the Company and Pattern Energy Group LP, dated as of October 2, 2013. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated September 26, 2013).
10.11	Management, Operation and Maintenance Agreement, dated as of December 20, 2013, by and between Pattern Panhandle Wind 2 LLC and Pattern Operators LP (PH2 MOMA) (Incorporated by reference to Exhibit 14 to the Company's Current Report on Form 8-K dated December 20, 2013).
10.12	Project Administration Agreement, dated as of December 20, 2013, by and between Pattern Panhandle Wind 2 LLC and Pattern Operators LP (PH2 PAA) (Incorporated by reference to Exhibit 15 to the Company's Current Report on Form 8-K dated December 20, 2013).
10.13	Employment Agreement between Pattern Energy Group Inc. and Michael M. Garland dated October 2. 2013 (Incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013).

Exhibit No.	Description Of Exhibits
10.14	Employment Agreement between Pattern Energy Group Inc. and Hunter H. Armistead dated October 2, 2013 (Incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013).
10.15	Employment Agreement between Pattern Energy Group Inc. and Daniel M. Elkort dated October 2, 2013 (Incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013).
10.16	Employment Agreement between Pattern Energy Group Inc. and Esben Pedersen dated October 2, 2013 (Incorporated by reference to Exhibit 10.16 to the Company's Registration Statement on Form S-1 dated April 25, 2014 (Registration No. 333-195488)).
10.17	Employment Agreement between Pattern Energy Group Inc. and Michael J. Lyon dated October 2, 2013 (Incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q dated May 7, 2015).
10.18	Assignment and Assumption of Lease and Consent of Landlord Agreement, effective as of January 1, 2016, by and between Pattern Energy Group LP, Pattern Energy Group Inc., and AMB Pier One, LLC (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated January 25, 2016).
10.19	Purchase Rights Agreement among Pattern Energy Group Inc., Pattern Energy Group 2 LP, and (solely with respect to Article III thereto) Pattern Energy Group Holdings 2 LP and Pattern Energy Group Holdings 2 GP LLC, dated as of December 8, 2016 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated December 8, 2016).
10.20	Service Mark License Agreement between Pattern Energy Group Inc. and Pattern Energy Group 2 LP, dated as of December 8, 2016 (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated December 8, 2016).
10.21	Amended and Restated Purchase Rights Agreement by and among Pattern Energy Group LP, Pattern Energy Group Inc., Pattern Energy Group Holdings LP (solely with respect to Article IV therein) and Pattern Energy GP LLC, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.22	Amended and Restated Purchase Rights Agreement by and among Pattern Energy Group 2 LP, Pattern Energy Group Inc., Pattern Energy Group Holdings 2 LP (solely with respect to Article III therein) and Pattern Energy Group Holdings 2 GP LLC, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.23	Second Amended and Restated Non-Competition Agreement by and among Pattern Energy Group LP, Pattern Energy Group Inc. and Pattern Energy Group 2 LP, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.24	Amended and Restated Multilateral Management Services Agreement by and among Pattern Energy Group Inc., Pattern Energy Group LP and Pattern Energy Group 2 LP, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K filed June 19, 2017)

10.25	Second Amended and Restated Limited Partnership Agreement of Pattern Energy Group Holdings 2 LP, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.26	Joint Venture Agreement between PSP Investments and Pattern Energy Group Inc., dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.27	Sponsor Services Agreement between Pattern Energy Group Inc. and PSP Investments, dated as of June 16, 2017 (Incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.28	Purchase and Sale Agreement by and among Pattern Energy Group Inc., Vertuous Energy Canada Inc. and Pattern Energy Group LP, dated as of June 16, 2017 (Meikle PSA) (Incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.29	Purchase and Sale Agreement by and among Pattern Energy Group Inc., Vertuous Energy Canada Inc. and Pattern Energy Group LP, dated as of June 16, 2017 (MSM PSA) (Incorporated by reference to Exhibit 10.9 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.30	Purchase and Sale Agreement by and among Vertuous Energy LLC and Pattern Energy Group Inc., dated as of June 16, 2017 (Panhandle 2 PSA) (Incorporated by reference to Exhibit 10.10 to the Company's Current Report on Form 8-K filed June 19, 2017).
10.31	Amended and Restated Limited Partnership Agreement among Pattern Canada Finance Company ULC, Vertuous Energy Canada Inc. and Meikle Wind Energy Corp. dated as of August 10, 2017 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed August 14, 2017).
10.32	Shareholders Agreement among Pattern Canada Finance Company ULC, Vertuous Energy Canada Inc. and Meikle Wind Energy Corp. dated as of August 10, 2017 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed August 14, 2017).
84	

Exhibit No.	Description Of Exhibits
10.33	Amended and Restated Limited Liability Company Agreement of PAN2 B2, LLC, a Delaware limited liability company, dated as of December 22, 2017 (Incorporated by reference to Exhibit 10.1 to the
10.33	Company's Current Report on Form 8-K dated December 28, 2017).
	Company's Current Report on Form of R dated December 20, 2017.
	Voting Agreement between Panhandle B Member 2 LLC and Vertuous Energy LLC made as of
10.34	December 22, 2017 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form
	8-K dated December 28, 2017).
	Letter Agreement between Pattern Energy Group Inc. and Public Sector Pension Investment Board, dated
10.35	as of December 22, 2017 (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on
	Form 8-K dated December 28, 2017).
	Deimburgement Agreement between Dettern Engage Crown Inc. and Dublic Sector Dengion Investment
10.36	Reimbursement Agreement between Pattern Energy Group Inc. and Public Sector Pension Investment Board, dated as of December 22, 2017 (Incorporated by reference to Exhibit 10.4 to the Company's
10.00	Current Report on Form 8-K dated December 28, 2017).
	Registration Rights Agreement (Side Letter) among PSP Investments and the Pattern Energy Group, Inc. dated as of October 27, 2017 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report
10.37	on Form 8-K dated October 30, 2017).
	on Torri o It dated o closer 20, 2017 j.
10.20	Purchase and Sale Agreement by and between Pattern Energy Group Inc. and Pattern Energy Group LP
10.38	dated as of February 26, 2018 related to indirect interests in Green Power Tsugaru GK (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 27, 2018).
	reference to Exhibit 10.1 to the Company's Current Report on Form 6-K dated February 27, 2010).
	Purchase and Sale Agreement by and between Pattern Energy Group Inc. and Green Power Investment
10.39	Corporation dated as of February 26, 2018 related to indirect interests in Green Power Tsugaru GK
	(Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated February 27, 2018).
	<u>27, 2016).</u>
	Purchase and Sale Agreement by and between Pattern Energy Group Inc. and Pattern Energy Group LP
10.40	dated as of February 26, 2018 related to indirect interests in GK Green Power Kanagi, GK Green Power
100	Otsuki and GK Green Power Futtsu (Incorporated by reference to Exhibit 10.3 to the Company's Current
	Report on Form 8-K dated February 27, 2018).
	Purchase and Sale Agreement by and between Pattern Energy Group Inc. and Green Power Investment
	Corporation dated as of February 26, 2018 related to indirect interests in GK Green Power Kanagi, GK
10.41	Green Power Otsuki and Otsuki Wind Power Corporation (Incorporated by reference to Exhibit 10.4 to
	the Company's Current Report on Form 8-K dated February 27, 2018).
	Deferred Payment Agreement by and between Pattern Energy Group Inc. and Pattern Energy Group LP
10.42	dated as of February 26, 2018 (Incorporated by reference to Exhibit 10.5 to the Company's Current
	Report on Form 8-K dated February 27, 2018).
	Consent and Waiver Agreement dated as of May 21, 2018 entered into by Public Sector Pension
10.43	Investment Board and Pattern Energy Group Inc. related to the Conejo Solar project (Incorporated by
10.73	reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated May 25, 2018).

10.44	Waiver Agreement dated as of May 21, 2018 entered into by Pattern Energy Group LP and the Company related to the Conejo Solar project (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 25, 2018).
10.45	Unanimous Shareholder Agreement of Pattern MSM GP Holdings Inc. among Pattern Canada Finance Company ULC, Vertuous Energy Canada Inc. and Pattern MSM GP Holdings Inc., dated as of August 10, 2018 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 10, 2018).
10.46	Amended and Restated Limited Partnership Agreement of MSM LP Holdings LP among Pattern Canada Finance Company ULC, Vertuous Energy Canada Inc. and Pattern MSM GP Holdings Inc., dated as of August 10, 2018 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated August 10, 2018).
10.47	Shareholders Agreement of Pattern Development MSM Management ULC among Pattern Canada Finance Company ULC, Vertuous Energy Canada Inc. and Pattern Development MSM Management ULC, dated as of August 10, 2018 (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated August 10, 2018).
10.48	Amendment No. 2018-2 to Members' Agreement (Futtsu) dated as of August 14, 2018 by and between Green Power Generation GK and Green Power Investment Corporation (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 14, 2018).
10.49	Memorandum of Understanding dated as of August 16, 2018 entered into by Pattern Gulf Wind Holdings LLC and Pattern Western Development LLC (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated August 28, 2018).
85	

Exhibit No.	Description Of Exhibits Diversions and Sala Agreement by and among Pottern Energy Crown Inc., Vertugue Energy I. C. and
10.50	Purchase and Sale Agreement by and among Pattern Energy Group Inc., Vertuous Energy LLC, and Pattern Energy Group 2 LP, dated as of November 20, 2018 (Stillwater) (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated November 20, 2018.
10.51	Amended and Restated Limited Liability Company Agreement of Stillwater New B Member LLC, between Pattern US Finance Company LLC and Vertuous Energy LLC (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated November 20, 2018).
10.52	Reimbursement Agreement between Pattern Energy Group Inc. and Public Sector Pension Investment Board, dated as of November 20, 2018 (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated November 20, 2018).
21.1**	Subsidiaries of the Company
23.1**	Consent of Independent Registered Public Accounting Firm
23.2**	Consent of Independent Registered Public Accounting Firm
23.3**	Consent of PricewaterhouseCoopers LLP
24.1	Powers of Attorney (included in the signature pages to this filing).
31.1**	Certifications of the Chief Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2**	Certifications of the Chief Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32*	Certifications of the Company's Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS**	XBRL Instance Document
101.SCH**	XBRL Taxonomy Extension Schema Document
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document
*These certi	fications accompany this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not

be deemed "filed" by the Company for purposes of Section 18 of the Exchange Act.

^{**} Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: March 1, 2019 Pattern Energy Group Inc. By/s/ Michael M. Garland

Michael M. Garland

President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Kim H. Liou and Michael J. Lyon, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents, or any of them or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ MICHAEL M. GARLAND Michael M. Garland	President, Chief Executive Officer and Director of Pattern Energy Group Inc. (Principal Executive Officer)	March 1, 2019
/s/ ALAN R. BATKIN Alan R. Batkin	Director and Chairman of Pattern Energy Group Inc.	March 1, 2019
/s/ THE LORD BROWNE OF MADINGLEY The Lord Browne of Madingley	Director of Pattern Energy Group Inc.	March 1, 2019
/s/ RICHARD A. GOODMAN Richard A. Goodman	Director of Pattern Energy Group Inc.	March 1, 2019
/s/ DOUGLAS G. HALL Douglas G. Hall	Director of Pattern Energy Group Inc.	March 1, 2019
/s/ PATRICIA M. NEWSON Patricia M. Newson	Director of Pattern Energy Group Inc.	March 1, 2019
/s/ MONA K. SUTPHEN Mona K. Sutphen	Director of Pattern Energy Group Inc.	March 1, 2019
/s/ MICHAEL J. LYON Michael J. Lyon	Chief Financial Officer of Pattern Energy Group Inc. (Principal Financial Officer)	March 1, 2019
/s/ RICHARD A. OSTBERG Richard A. Ostberg	Senior Vice President, Controller Pattern Energy Group Inc. (Principal Accounting Officer)	March 1, 2019

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

F-1

Report of Independent Registered Public Accounting Firm	<u>F-2</u>
Consolidated Balance Sheets as of December 31, 2018 and December 31, 2017	<u>F-4</u>
Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016	<u>F-5</u>
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016	<u>F-6</u>
Consolidated Statement of Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016	<u>F-7</u>
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016	<u>F-8</u>
Notes to Consolidated Financial Statements	F-10

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

Pattern Energy Group Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Pattern Energy Group Inc. and its subsidiaries (the "Company") as of December 31, 2018, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for the year then ended, including the related notes and financial statement schedule listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Annual Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audit of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding

prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP San Francisco, California March 1, 2019 We have served as the Company's auditor since 2018.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Pattern Energy Group Inc. Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Pattern Energy Group Inc. (the Company) as of December 31, 2017, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity and cash flows for each of the two years in the period ended December 31, 2017, and the related notes and financial statement Schedule I listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of Pattern Energy Group Inc. at December 31, 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We did not audit the financial statements of SP Armow Wind Ontario LP, South Kent Wind LP and Grand Renewable Wind LP partnerships in which the Company has a 50%, 50% and 45% interest, respectively. In the consolidated financial statements, the Company's investment in SP Armow Wind Ontario LP, South Kent Wind LP and Grand Renewable Wind LP is stated at \$145,652,000 at December 31, 2017, and the Company's equity in the net earnings (losses) of SP Armow Wind Ontario LP, South Kent Wind LP and Grand Renewable Wind LP is stated at \$46,000,000 and \$24,704,000 for the years ended December 31, 2017 and 2016, respectively. The statements for SP Armow Wind Ontario LP, South Kent Wind LP and Grand Renewable Wind LP were audited by other auditors whose reports have been furnished to us, and our opinion, insofar as it relates to the amounts included for SP Armow Wind Ontario LP, South Kent Wind LP and Grand Renewable Wind LP, is based solely on the reports of the other auditors.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP We served as the Company's auditor from 2012 to 2018 San Francisco, California March 1, 2018

Pattern Energy Group Inc.

Consolidated Balance Sheets

(In millions of U.S. dollars, except share and par value data)

	December 31	
	2018	2017
Assets		
Current assets:		
Cash and cash equivalents (Note 8)	\$101	\$117
Restricted cash (Note 8)	4	9
Counterparty collateral	6	30
Trade receivables (Note 8)	50	55
Derivative assets, current	14	19
Prepaid expenses (Note 8)	18	18
Deferred financing costs, current, net of accumulated amortization of \$3 and \$3 as of December 31,	2	1
2018 and December 31, 2017, respectively	2	1
Other current assets (Note 8)	16	21
Total current assets	211	270
Restricted cash (Note 8)	18	12
Major construction advances	84	
Construction in progress	259	
Property, plant and equipment, net (Note 8)	4,119	3,965
Unconsolidated investments	270	311
Derivative assets	9	10
Deferred financing costs	8	8
Net deferred tax assets	5	6
Intangible assets, net (Note 8)	219	136
Goodwill	58	
Other assets (Note 8)	34	24
Total assets	\$5,294	\$4,742

(Continued)

Pattern Energy Group Inc.

Consolidated Balance Sheets

(In millions of U.S. dollars, except share and par value data)

	Decem	ber 31,
	2018	2017
Liabilities and equity		
Current liabilities:		
Accounts payable and other accrued liabilities (Note 8)	\$67	\$54
Accrued construction costs (Note 8)	27	1
Counterparty collateral liability	6	30
Accrued interest (Note 8)	14	17
Dividends payable	42	41
Derivative liabilities, current	2	8
Revolving credit facility, current	198	

Current portion of long-term debt, net	56	52
Contingent liabilities, current	31	3
Asset retirement obligations, current	24	
Other current liabilities (Note 8)	11	12
Total current liabilities	478	218
Revolving credit facility	25	
Long-term debt, net	2,004	1,879
Derivative liabilities	31	21
Net deferred tax liabilities	117	56
Intangible liabilities, net	56	51
Contingent liabilities	142	62
Asset retirement obligations (Note 8)	185	57
Other long-term liabilities (Note 8)	71	50
Advanced lease revenue	26	
Total liabilities	3,135	2,394
Commitments and contingencies (Note 19)		
Equity:		
Class A common stock, \$0.01 par value per share: 500,000,000 shares authorized; 98,051,629 and	1	1
97,860,048 shares outstanding as of December 31, 2018 and December 31, 2017, respectively	1	1
Additional paid-in capital	1,130	1,235
Accumulated loss	(27)	(112)
Accumulated other comprehensive loss	(52)	(26)
Treasury stock, at cost; 223,040 and 157,812 shares of Class A common stock as of December 31,		
2018 and December 31, 2017, respectively	(5)	(4)
Total equity before noncontrolling interests	1,047	1,094
Noncontrolling interests	1,112	1,254
Total equity	2,159	2,348
Total liabilities and equity	\$5,294	\$4,742
	-	•

(Concluded)

See accompanying notes to consolidated financial statements.

Pattern Energy Group Inc. Consolidated Statements of Operations (In millions of U.S. dollars, except share data)

	Year ended December 31,			
	2018	2017	2016	
Revenue:				
Electricity sales	\$464	\$ 402	\$ 346	
Other revenue	19	9	8	
Total revenue	483	411	354	
Cost of revenue:				
Project expense	143	130	128	
Transmission costs	26	19	1	
Depreciation, amortization and accretion	250	199	175	
Total cost of revenue	419	348	304	
Gross profit	64	63	50	
Operating expenses:				
General and administrative	40	39	35	
Related party general and administrative	15	14	10	
Impairment expense	7		_	
Total operating expenses	62	53	45	
Operating income	2	10	5	
Other income (expense):				
Interest expense	(109)	(102)	(78)	
Gain (loss) on derivatives	17	(10)		
Earnings in unconsolidated investments, net	1	42	30	
Early extinguishment of debt	(6)	(9)		
Net earnings (loss) on transactions	69	(1)	_	
Other income (expense), net	(11)		3	
Total other expense	(39)	(80)	(48)	
Net loss before income tax	(37)	(70)	(43)	
Income tax provision	32	12	9	
Net loss	(69)	(82)	(52)	
Net loss attributable to noncontrolling interests	(211)	(64)	(35)	
Net income (loss) attributable to Pattern Energy	\$142	\$ (18)	\$ (17)	
Weighted average number of common shares outstanding				
Basic	97,456	.4897 179,343	79,382,388	
Diluted			79,382,388	
Net income (loss) per share attributable to Pattern Energy	*	. , ,	, ,	
Basic	\$1.45	\$ (0.20)	\$ (0.22)	
Diluted	\$1.45	\$ (0.20)	\$ (0.22)	
		•	-	

See accompanying notes to consolidated financial statements.

Pattern Energy Group Inc. Consolidated Statements of Comprehensive Income (Loss) (In millions of U.S. Dollars)

December 31, 2018 2017 2016 2018 2017 2016 2018 2018 2017 2016 2018		Year ended
Net loss Other comprehensive income (loss): Change in foreign currency translation, net of tax impact of zero, \$(4) and zero, respectively Cash flow hedge activity: Change in unrealized losses on cash flow hedges, net of tax impact of \$3, (\$1) and \$1, respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented \$(34) 37		December 31,
Other comprehensive income (loss): Change in foreign currency translation, net of tax impact of zero, \$(4) and zero, respectively Cash flow hedge activity: Change in unrealized losses on cash flow hedges, net of tax impact of \$3, (\$1) and \$1, respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented		2018 2017 2016
Change in foreign currency translation, net of tax impact of zero, \$(4) and zero, respectively Cash flow hedge activity: Change in unrealized losses on cash flow hedges, net of tax impact of \$3, (\$1) and \$1, respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (37) 15 5 (4) (3) (7) 1 8 — 2 14 6 (103) (45) (41)	Net loss	\$(69) \$(82) \$(52)
Cash flow hedge activity: Change in unrealized losses on cash flow hedges, net of tax impact of \$3, (\$1) and \$1, respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)	Other comprehensive income (loss):	
Change in unrealized losses on cash flow hedges, net of tax impact of \$3, (\$1) and \$1, respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)	Change in foreign currency translation, net of tax impact of zero, \$(4) and zero, respectively	(37) 15 5
respectively Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (4) (3) (7) (4) (3) (7) (5) 11 7 (6) (6) (10) (10) (10) (10) (10) (10) (10)	Cash flow hedge activity:	
Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)		(4) (3) (7)
Total change in cash flow hedge activity Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented 1 8 — 2 14 6 (34) 37 11 (103) (45) (41)	1 •	
Other comprehensive income related to equity method investee net of tax impact of less than \$1 million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)	Reclassifications to net loss, net of tax impact of \$(1), \$(1) and \$(1), respectively	5 11 7
million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)	Total change in cash flow hedge activity	1 8 —
million, \$(5) and \$(2), respectively Total other comprehensive income (loss), net of tax Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (34) 37 11 (103) (45) (41) (219) (63) (35)	Other comprehensive income related to equity method investee net of tax impact of less than \$1	2 14 6
Comprehensive loss Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (103) (45) (41) (219) (63) (35)	million, \$(5) and \$(2), respectively	2 14 0
Less comprehensive loss attributable to noncontrolling interests, net of tax impact of less than \$1 million for all years presented (219) (63) (35)	Total other comprehensive income (loss), net of tax	(34) 37 11
million for all years presented (219) (63) (33)	Comprehensive loss	(103) (45) (41)
•		(219) (63) (35)
	• •	\$116 \$18 \$(6)

See accompanying notes to consolidated financial statements.

Pattern Energy Group Inc. Consolidated Statement of Stockholders' Equity (In millions of U.S. Dollars, except share data)

	Class A Common S	tock	Treasury S	Stock	Addition Paid-in	nal Accumu	Accumula Other lated Compreh		Noncontro	l Tiog al	
	Shares	Amo	ou silt iares	Amou	raid-in en C apital	Loss	Income (Loss)	CHAPVOLI	Interests	Equity	7
Balances at December 31, 2015	74,709,442	\$ 1	(65,301)	\$(2)	\$983	\$ (77)	\$ (73)	\$832	\$ 944	\$1,770	6
Issuance of Class A common stock, net of issuance costs Issuance of Class A	12,540,504	_	_	_	286	_	_	286	_	286	
common stock under equity incentive award plan, net	1 ^{271,705}	_	_	_	_	_	_	_	_	_	
Repurchase of shares for employee tax withholding	_		(45,663)	(1)	_	_	_	(1) —	(1)
Stock-based compensation	_	_	_		5	_	_	5		5	
Dividends declared (\$1.58 per Class A common share)	_		_	_	(128) —	_	(128) —	(128)
Distributions to noncontrolling interests	_	_	_	_	_	_	_	_	(18)	(18)
Net loss Other comprehensive	_	_	_	_	_	(17)	_	•) (35	(52)
income, net of tax Balances at	_	_	_	_	_	_	11	11	_	11	
December 31, 2016 Issuance of Class A	87,521,651	1	(110,964)	(3)	1,146	(94)	(62)	988	891	1,879	
common stock, net of issuance costs	10,268,261		_	_	237	_	_	237	_	237	
Issuance of Class A common stock under equity incentive award plan, net	1 ^{227,948}		_	_	_	_	_	_	_	_	
Repurchase of shares for employee tax withholding	_		(46,848)	(1)	_	_	_	(1) —	(1)
Stock-based compensation	_	_	_		5	_	_	5	_	5	
Dividends declared (\$1.67 per Class A common share)	_	_	_	_	(151) —	_	(151) —	(151)

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Acquisitions	_	_	_	_							390		390	
Distributions to noncontrolling	_	_	_	_	_					_	(20)	(20)
interests Partial sale of														
subsidiary		—			(2) —		_		(2) 56		54	
Net loss	_		_			(18)			(18) (64)	(82)
Other comprehensive		_						36		36	1		37	
income, net of tax								20		50	•		57	
Balances at December 31, 2017	98,017,860	1	(157,812)	(4)	1,235	(112)	(26)	1,094	1,254		2,348	
Issuance of Class A														
common stock under	256,000													
equity incentive award	256,809	_		_									_	
plan, net														
Repurchase of shares			(6 5.00 0.)	(1)						/1			/4	,
for employee tax	_	_	(65,228)	(1)						(1) —		(1)
withholding Stock-based														
compensation	_	—	_	—	4			_		4			4	
Dividends declared														
(\$1.69 per Class A	_		_		(109) (57)			(166) —		(166)
common share)														
Acquisitions		—									49		49	
Sale of subsidiaries		_		_							(32)	(32)
Contribution from noncontrolling											98		98	
interests	_		_							_	70		70	
Distributions to														
noncontrolling	_		_			_					(38)	(38)
interests														
Net income (loss)	_	_	_	_		142				142	(211)	(69)
Other comprehensive								(26	`	(26	\ (0	`	(2.4	`
income (loss), net of tax				_				(26)	(26) (8)	(34)
Balances at														
December 31, 2018	98,274,669	\$ 1	(223,040)	\$ (5)	\$1,130	\$ (27)	\$ (52)	\$1,047	\$ 1,112		\$2,159)

See accompanying notes to consolidated financial statements.

Pattern Energy Group Inc. Consolidated Statements of Cash Flows (In millions of U.S. dollars)

	Year ended December 31, 2018 2017 2016
Operating activities	
Net loss	\$(69) \$(82) \$(52)
Adjustments to reconcile net loss to net cash provided by operating activities:	
Depreciation, amortization and accretion	280 215 189
Impairment expense	7 — —
Loss on derivatives	4 16 22
Stock-based compensation	5 5 5
Deferred taxes	16 15 8
Earnings in unconsolidated investments, net	(1) (41) (30)
Distribution from unconsolidated investments	48 54 15
Gain on transactions	(71) — —
Early extinguishment of debt	6 9 —
Other reconciling items	1 (5) (4)
Changes in operating assets and liabilities:	
Counterparty collateral asset	24 14 (44)
Trade receivables	1 (10) 8
Other current assets	15 (14)(4)
Other assets (non-current)	(6) 2 1
Accounts payable and other accrued liabilities	3 18 (3)
Counterparty collateral liability	(24) (14) 44
Advanced lease revenue	34 — —
Other current liabilities	26 15 2
Other long-term liabilities	(20) 21 7
Net cash provided by operating activities	279 218 164
Investing activities	
Cash paid for acquisitions and investments, net of cash and restricted cash acquired	(415) (297) (136)
Proceeds from sale of investments, net of cash and restricted cash distributed	214 — —
Capital expenditures	(181) (44) (33)
Distribution from unconsolidated investments	10 13 42
Other assets	(1) 8 3
Net cash used in investing activities	(373) (320) (124)

Pattern Energy Group Inc. Consolidated Statements of Cash Flows (In millions of U.S. dollars)

	Year e	nded	
	Decem	iber 31,	,
	2018	2017	2016
Financing activities			
Proceeds from public offering, net of issuance costs		237	286
Dividends paid	(165)	(145)	(120)
Capital contributions - noncontrolling interests	98		
Capital distributions - noncontrolling interests	(38)	(20)	(18)
Payment for financing fees	(9)	(16)	
Proceeds from short-term debt	562	333	175
Repayment of short-term debt	(402)	(513)	(350)
Proceeds from long-term debt and other	226	694	—
Repayment of long-term debt and other	(186)	(483)	(48)
Proceeds (payments) for termination of designated derivatives	1	(14)	
Disposition of controlling interest, net		58	—
Other financing activities	(4)	(6)	(2)
Net cash provided by (used in) financing activities	83	125	(77)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(4)	6	_
Net change in cash, cash equivalents and restricted cash	(15)	29	(37)
Cash, cash equivalents and restricted cash at beginning of period	138	109	146
Cash, cash equivalents and restricted cash at end of period	\$123	\$138	\$109
Supplemental disclosures			
Cash payments for income taxes	\$2	\$—	\$ —
Cash payments for interest expense	\$97	\$86	\$70
Schedule of non-cash activities			
Change in property, plant and equipment	\$224	\$2	\$1
Change in additional paid-in capital	\$ —	\$(2)	\$ —
See accompanying notes to consolidated financial statements.			

Pattern Energy Group Inc.

Notes to Consolidated Financial Statements

1. Organization

Pattern Energy Group Inc. (Pattern Energy or the Company) is a vertically integrated renewable energy company with a mission to transform the world to renewable energy. Our business consists of (i) an operating business segment which is comprised of a portfolio of high-quality renewable energy power projects located in many attractive markets that produces long-term stable cash flows and (ii) ownership interests in an upstream development platform aligned with our operating business which provides us access to a pipeline of projects and potential for higher returns through project development.

The Company holds ownership interests in 24 renewable energy projects with an operating capacity that totals approximately 4 gigawatts (GW) which are located in the United States, Canada and Japan.

Pattern Energy was organized in the state of Delaware in October 2012. The Company issued 100 shares in October 2012 to Pattern Renewables LP, a 100% owned subsidiary of Pattern Energy Group LP and subsequently in October 2013 conducted an initial public offering.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States (U.S. GAAP). They include the results of wholly-owned and partially-owned subsidiaries in which the Company has a controlling interest with all significant intercompany accounts and transactions eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences may be material to the consolidated financial statements.

Out-of-Period Adjustment

During the year ended December 31, 2018, the Company identified a \$1 million error in tax expense related to the recognition of net operating loss carryforwards in its Chilean entity. The Company concluded the error was not material to any previously reported period and is not material to the year ended December 31, 2018. The Company recorded the error as an out-of-period adjustment in the year ended December 31, 2018.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash in banks and highly liquid investments with original maturities of three months or less.

Restricted Cash

Restricted cash consists of cash balances which are restricted as to withdrawal or usage and includes cash to collateralize bank letters of credit related primarily to transmission interconnection rights, power sale agreements (PSA) and for certain reserves required under the Company's loan agreements.

Reconciliation of Cash and Cash Equivalents and Restricted Cash as presented on the Statements of Cash Flows The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the consolidated balance sheets that sum to the total of the same such amounts shown in the consolidated statements of cash flows (in millions):

	Dece	mber 3	31,
	2018	2017	2016
Cash and cash equivalents	\$101	\$117	\$84
Restricted cash - current	4	9	12
Restricted cash	18	12	13
Cash, cash equivalents and restricted cash shown in the consolidated statements of cash flows	\$123	\$138	\$109

Counterparty Collateral and Collateral Liability

As a result of a counterparty's credit rating downgrade, the Company received collateral related to an energy derivative agreement, as discussed in Note 12, Derivative Instruments. The Company does not have the right to pledge, invest, or use the collateral for general corporate purposes. As of December 31, 2018, the Company has recorded a current asset of approximately \$6 million to counterparty collateral and a current liability of approximately \$6 million to counterparty collateral received and corresponding obligation to return the collateral, respectively.

Trade Receivables

The Company's trade receivables are generated by selling energy and renewable energy credits primarily to creditworthy utilities and large commercial companies. The Company believes that all amounts are collectible and an allowance for doubtful accounts is not required as of December 31, 2018 and 2017. Although PG&E and PREPA, offtakers for Hatchet Ridge and Santa Isabel, respectively, have filed for reorganization and debt restructuring, the Company has assessed and determined that trade receivables at Hatchet Ridge and Santa Isabel were not impaired as of December 31, 2018.

Major Construction Advances

Major construction advances represent advances to (i) suppliers for the manufacture of wind turbines, transmission lines, and solar panels in accordance with component equipment supply agreements and (ii) builders in accordance with plant construction contracts. These construction advances are reclassified to construction in progress when the Company takes legal title to the equipment.

Derivatives

The Company may enter into interest rate swaps, interest rate caps, forwards and other agreements to manage its interest rate, electricity price and foreign exchange rate risk. The Company recognizes its derivative instruments as assets or liabilities at fair value in the consolidated balance sheets, unless the derivative instruments qualify for the "normal purchase normal sale" (NPNS) scope exception to derivative accounting.

Contracts used in normal business operations that are settled by physical delivery, among other criteria, are eligible for and may be designated as NPNS. NPNS contracts do not meet the definition of derivatives, and therefore, contracts associated with the sale of energy are recognized as electricity sales when revenue recognition criteria are met and contracts associated with the production of electricity are recognized as project expense when incurred on the consolidated statements of operations.

The Company does not have contracts subject to master netting agreements with counterparties, as such assets and liabilities are presented gross on the consolidated balance sheets. Accounting for changes in the fair value of a derivative instrument depends on whether it has been designated as part of a hedging relationship and on the type of hedging relationship. For derivative instruments that qualify and are designated as cash flow hedges, the change in unrealized losses on cash flow hedges, net of tax is reported as a component of other comprehensive income (loss) (OCI), and is reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. The ineffective portion of change in fair value is recorded as a component of net income (loss) on the consolidated statements of operations. The Company discontinues hedge accounting for its cash flow hedges prospectively when it has determined that the hedging relationship has materially changed since its inception or when the hedging instrument is no longer considered highly effective at offsetting the hedged risk. If the hedged transaction is no longer probable of occurring, any gain or loss previously deferred

in OCI will be immediately recognized into earnings. If hedge accounting is discontinued for any other reason, any previously deferred gain or loss will remain in OCI and amortized into earnings as the hedged transaction affects future earnings. For undesignated derivative instruments, the change in fair value is reported as a component of net income (loss) on the consolidated statements of operations.

Fair Value of Financial Instruments

Accounting Standards Codification (ASC) 820, Fair Value Measurement, defines fair value as the price at which an asset could be exchanged or a liability transferred in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or derived from such prices. Where observable prices or inputs are not available, valuation models are applied which may involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity. See Note 14, Fair Value Measurement.

Deferred Financing Costs

Financing costs incurred with securing a construction loan are recorded in the Company's consolidated balance sheets as an offset to the construction loan and amortized over the contractual life of the loan to construction in progress using the effective interest method. Financing costs incurred with securing a term loan are recorded in the Company's consolidated balance sheets as an offset to the term loan and amortized to interest expense in the Company's consolidated statements of operations over the contractual life of the loan using the effective interest method. If the term loan has not been drawn on, financing costs incurred with securing the term loan are recorded in the Company's consolidated balance sheets as an asset.

Financing costs related to a revolving credit facility or a letter of credit facility are recorded in the Company's consolidated balance sheets as an asset and amortized to interest expense in the Company's consolidated statements of operations on a straight-line basis over the contractual term of the arrangement.

Construction in Progress

Construction in progress represents the accumulation of project development costs and construction costs, including the costs incurred for the purchase of major equipment such as turbines for which the Company has taken legal title, civil engineering, electrical and other related costs. Other capitalized costs include reclassified deferred development costs, amortization of intangible assets, amortization of deferred financing costs, capitalized interest and other costs required to place a project into commercial operation. Deferred development costs represent the accumulated costs of initial permitting, environmental reviews, land rights and obligations and preliminary design and engineering work. The Company expenses all project development costs until a project is determined to be technically feasible and likely to achieve commercial success, typically when a power purchase agreement has been negotiated. The Company begins capitalizing deferred development costs as a component of construction in progress on the date the project commences construction. Once the project achieves commercial operation, the Company reclassifies the amounts recorded in construction in progress to property, plant and equipment.

Property, Plant and Equipment

Property, plant and equipment represents the costs of completed and operational projects transferred from construction in progress, as well as other costs incurred for purchasing assets such as land, computer equipment and software, furniture and fixtures, leasehold improvements and other equipment. Property, plant and equipment are stated at cost, less accumulated depreciation. Depreciation is calculated using the straight-line method over the respective assets' useful lives. Wind farms for which construction began before 2011 are depreciated over 20 years and wind farms for which construction began after 2011 are depreciated over 25 to 30 years. Solar facilities are depreciated over 25 years. Transmission assets are depreciated over 50 years. The remaining assets are depreciated over two to five years. Improvements to property, plant and equipment deemed to extend the useful economic life of an asset are capitalized. Repair and maintenance costs are expensed as incurred.

Intangible Assets and Intangible Liabilities

Long-lived intangible assets and intangible liabilities primarily include power purchase agreements (PPAs), land easements, land options, tax savings and mining rights. PPAs obtained through acquisitions are valued as of the acquisition date and the difference between the contract price and the estimated fair value is recorded as an intangible asset or liability. If the contract price is higher than the estimated fair value, the Company will recognize an intangible

asset. If the contract price is lower than the estimated fair value, the Company will recognize an intangible liability. Land easements, land options and mining rights are recognized at the carryover basis from the seller as their carrying costs approximate fair value.

The Company generally amortizes PPAs using the straight-line method over the remaining term of the related PPA. The Company amortizes land easements, land options, tax savings and mining rights using the straight-line method over the term of their estimated useful lives, which represents the term of the land easements, land option, tax savings and mining rights agreements, ranging from approximately 9 to 50 years. The Company periodically evaluates whether events or changes in circumstances have occurred that indicate the carrying amount of long-lived intangible assets may not be recoverable, or information indicates that impairment may exist.

Accounting for Impairment of Long-Lived Assets

The Company periodically evaluates long-lived assets for potential impairment whenever events or changes in circumstances have occurred that indicate that impairment may exist, or the carrying amount of the long-lived asset may not be recoverable. An impairment loss is recognized only if the carrying amount of a long-lived asset is not recoverable based on its estimated future undiscounted cash flows. An impairment loss is calculated based on the excess of the carrying value of the long-lived asset over the fair value of such long-lived asset, with the fair value determined based on an estimate of discounted future cash flows.

If the Company meets the criteria for assets held for sale, to calculate the fair value of the assets less costs to sell, the Company considers factors including current sales prices and any recent legitimate offers. If the estimated fair value less costs to sell of an asset is less than its current carrying value, the asset is written down to its estimated fair value less costs to sell. Due to uncertainties in the estimation process, it is possible that actual results could differ from the estimates used in the Company's historical analysis. The Company's assumptions about project sale prices require significant judgment because the current market is highly sensitive to changes in economic conditions. The Company estimates the fair values of assets held for sale based on current market conditions and assumptions made by management, which may differ from actual results and may result in additional impairments if market conditions deteriorate. When assets are classified as held for sale, the Company does not continue to record depreciation or amortization for the respective assets. For the year ended December 31, 2018, the Company recognized impairment expense of \$7 million related to the sale of the Company's Chilean entities. See Note 4, Divested Operations. Goodwill

The Company records goodwill when the purchase price of an acquired business exceeds its fair value as of the acquisition date. Goodwill is not amortized, but is subject to an assessment for impairment at least annually in the fourth quarter or more frequently if events occur or circumstances change that will more likely than not reduce the fair value of the reporting unit below its carrying amount.

The Company may first assess goodwill for qualitative factors to determine whether it is necessary to perform a quantitative impairment test. The qualitative analysis considers entity-specific and macroeconomic factors and their potential impact on the key assumptions used in the determination of the fair value of the reporting unit. A quantitative impairment test is performed if the results of the qualitative assessment indicate that it is more likely than not that the fair value of the reporting unit is less than its carrying value, or if a qualitative assessment is not performed. Quantitative tests compare the fair value of the asset to its carrying value.

Variable Interest Entities

VIEs are entities that do not qualify for a scope exception from the variable interest model and are therefore subject to consolidation under the variable interest model. An entity is considered to be a VIE if (1) the entity does not have enough equity to finance its own activities without additional support, (2) the entity's at-risk equity holders lack the characteristics of a controlling financial interest, or (3) the entity is structured with non-substantive voting rights. ASC 810, Consolidation, defines the criteria for determining the existence of VIEs and provides guidance for consolidation. The Company consolidates VIEs where the Company is the primary beneficiary. The primary beneficiary of a VIE is the party that has the power to direct the activities that most significantly impact the performance of the entity and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the entity. To the extent the entity does not meet the definition of a VIE, the ASC 810 guidance for voting interest entities (VOEs) is applied. The usual condition for a controlling financial interest, and therefore consolidation by the Company, is ownership of a majority voting interest of a corporation or a majority of kick-out rights for a limited partnership.

To the extent the entity is not consolidated under the VIE or VOE models, the Company uses the equity method of accounting. These amounts are included in unconsolidated investments in the consolidated balance sheets.

Acquisitions

Accounting Standards Update (ASU) 2017-01, Clarifying the Definition of a Business (ASU 2017-01) provides a screen test to determine when a set of assets and activities should not be considered a business. Under ASU 2017-01, the Company will perform an initial screening test as of the acquisition date that, if met, results in the conclusion that the set is not a business. If the initial screening test is not met, the Company evaluates whether the set is a business based on whether there are inputs and a substantive process in place. The definition of a business impacts whether the Company consolidates an acquisition under business combination guidance or asset acquisition guidance. When the Company's acquisition is recognized as an equity method investment, the definition of a business impacts whether equity method goodwill can be recognized.

Business Combinations

The Company accounts for its business combinations by recognizing the identifiable assets acquired, the liabilities assumed, and any non-controlling interest in the acquiree at the acquisition date. The purchase is accounted for using the acquisition method, and the fair value of purchase consideration is allocated to the tangible and intangible assets acquired and the liabilities assumed, based on their estimated fair values. Contingent consideration is also recognized and measured at fair value as of the acquisition date. The excess, if any, of the fair value of the purchase consideration over the fair values of the identifiable net assets is recorded as goodwill. Conversely, the excess, if any, of the net fair values of the identifiable net assets over the fair value of the purchase consideration is recorded as a gain. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. These estimates and assumptions are inherently uncertain, and as a result, actual results may differ from estimates. Significant estimates include, but are not limited to, future expected cash flows, useful lives and discount rates. During the measurement period, which is up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to either goodwill or gain, depending on whether the fair value of purchase consideration is in excess of or less than net assets acquired. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings. Transaction costs associated with business combinations are expensed as incurred.

Asset Acquisitions

When the Company acquires assets and liabilities that do not constitute a business or a VIE of which the Company is the primary beneficiary, the fair value of the purchase consideration, including the transaction costs of the asset acquisition, is assumed to be equal to the fair value of the net assets acquired. The purchase consideration, including the transaction costs, is allocated to the individual assets and liabilities assumed based on their relative fair values. Contingent consideration associated with the acquisition is generally recognized only when the contingency is resolved. No goodwill is recognized in an asset acquisition.

When the Company acquires assets and liabilities that do not constitute a business but meet the definition of a VIE of which the Company is the primary beneficiary, the purchase is accounted for using the acquisition method described above for business combinations, except that no goodwill is recognized. To the extent that there is difference between the purchase consideration and the VIE's identifiable assets and liabilities recorded and measured at fair value, the difference is recognized as a gain or loss.

Equity Method Investments

When the Company acquires a noncontrolling interest in an entity where it is not the primary beneficiary, does not control any of the ongoing activities of the entity, and does not meet consolidation requirements of ASC 810 and ASU 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis, the investment is initially recognized as an equity method investment at cost. Any difference between the cost of an investment and the amount of underlying equity in net assets of an investee are considered basis differences. Basis differences related to the property, plant and equipment are amortized over the estimated economic useful life of the underlying long-lived assets while basis differences related to the PPA are amortized over the remaining term of the PPA. Transactions costs associated with equity method investments are included in the investment.

When the Company receives distributions in excess of the carrying value of its investment, and the Company is not liable for the obligations of the investee nor otherwise committed to provide financial support, the Company recognizes such excess distributions as equity method earnings in the period the distributions occur. Additionally, when the Company's carrying value in an unconsolidated investment is zero and the Company is not liable for the

obligations of the investee nor otherwise committed to provide financial support, the Company will not recognize equity in earnings (losses) or equity in other comprehensive income of unconsolidated investments. When the investee subsequently reports income, the Company does not record its share of such income until it equals the amount of distributions in excess of the carrying value that were previously recognized in income and previously unrecognized losses. During the years ended December 31, 2018, 2017 and 2016, the Company had no such obligations, commitments or requirements to provide additional funding for

unconsolidated investments with carrying values below zero during such years. Profits or losses related to intra-entity transactions with an equity method investment are eliminated until realized by the Company.

As a result, equity income or loss reported on the Company's income statement for certain unconsolidated investments may differ from a mathematical calculation of net income or loss attributable to the Company's equity interest based upon the factor of its equity interest and the net income or loss attributable to equity owners as shown on investee companies' income statements.

To the extent that cumulative comprehensive income exceeds cumulative distributions received, the Company records the distribution as distributions from unconsolidated investments on the Company's consolidated statements of cash flows within operating cash flows. All other distributions are recorded as distributions from unconsolidated investments on the Company's consolidated statements of cash flows within investing activities.

Noncontrolling Interests

Noncontrolling interests represent the portion of the Company's net income (loss), net assets and comprehensive income (loss) that is not allocable to the Company and is calculated based on ownership percentage, for applicable projects.

For the noncontrolling interests in the Company's Panhandle 1, Panhandle 2, Post Rock, Logan's Gap, Amazon Wind, Broadview Holdings, and Stillwater, the Company has determined that the operating partnership agreements do not allocate economic benefits pro rata to its two classes of investors and the appropriate methodology for calculating the noncontrolling interest balance that reflects the substantive profit sharing arrangement is a balance sheet approach using the hypothetical liquidation at book value (HLBV) method.

Under the HLBV method, the amounts reported as noncontrolling interest in the consolidated balance sheets and consolidated statements of operations represent the amounts the third party would hypothetically receive at each balance sheet reporting date under the liquidation provisions of the operating partnership agreement assuming the net assets of the projects were liquidated at recorded amounts determined in accordance with U.S. GAAP and distributed to the investors. The noncontrolling interest in the results of operations and comprehensive income (loss) is determined as the difference in noncontrolling interests in the consolidated balance sheets at the start and end of each reporting period, after taking into account any capital transactions between the projects and the third party. The noncontrolling interest balances in the projects are reported as a component of equity in the consolidated balance sheets.

Asset Retirement Obligation

The Company records asset retirement obligations (AROs) for the estimated costs of decommissioning turbines, removing above-ground installations and restoring sites, at the time when a contractual decommissioning obligation is incurred. AROs represent the present value of the expected costs and timing of the related decommissioning activities. The ARO assets and liabilities are recorded in property, plant and equipment and other long-term liabilities, respectively, in the consolidated balance sheets. The Company records accretion expense, which represents the increase in the asset retirement obligations, over the remaining or operational life of the associated wind project. Accretion expense is recorded as cost of revenue in the consolidated statements of operations using accretion rates based on credit adjusted risk-free interest rates. Changes resulting from revisions to the timing or amount of the original estimate of cash flows are recognized as an increase or a decrease in the asset retirement cost, or income when the asset retirement cost is depleted.

Accounting for Re-powering

The Company's commitment to a plan to re-power a project represents the decision to abandon the existing long-lived asset. The decision to abandon a long-lived asset is viewed as an indicator of impairment, and as such a recoverability test is required. If the recoverability test indicates that the carrying value is not recoverable, the fair value of the existing asset is compared to its net carrying value. If the fair value of the asset is less than its net carrying value, an impairment expense for the difference is recorded. The remaining useful life of the existing asset represents the period between the date the Company is committed to a plan to abandon the asset and the removal date. Due to the change in useful life, the Company will revise the estimated future cash flows of the asset retirement obligation. As a result, the Company will accelerate depreciation expense and accretion expense. In 2018, the Company committed to a plan to repower its Gulf Wind facility, as such the Company performed a recoverability test. The Company passed the recoverability test and did not recognize an impairment. However, beginning in the fourth quarter of 2018, the

Company revised the depreciable life for the portion of the Gulf Wind facility it expects to abandon to approximately 15 months. As of December 31, 2018, the Company's construction start date is not finalized and, as such the future depreciation rate may be adjusted as the timing of construction becomes more certain.

Contingent Liabilities

Contingent obligations that are acquired through business combinations are initially recorded at fair value on the date of acquisition while contingent obligations that are acquired through asset acquisitions are recorded when the contingency is resolved. Subsequent to the initial recognition of contingent obligations accounted for as a business combination, the Company accounts for these contingent obligations in a systematic and rational method in accordance with ASC 450, Contingencies.

The Company's contingent liabilities related to turbine availability warranties with turbine manufacturers and turbine availability guarantees associated with long-term turbine service arrangements are reported at net realizable value. Pursuant to these warranties and guarantees, if a turbine operates at less than minimum availability during the warranty or guarantee period, the manufacturer or service provider is obligated to pay, as liquidated damages, an amount for each percent that the turbine operates below the minimum availability threshold at the end of the warranty period. However, the Company does not recognize liquidated damages that remain contingent until the end of the warranty period. In addition, pursuant to certain of these warranties and guarantees, if a turbine operates at more than a specified availability during the warranty or guarantee period, the Company has an obligation to pay a bonus to the turbine manufacturer or service provider at the end of the warranty period. The Company records contingent liabilities at each reporting period associated with these bonuses expected to be paid at the end of the warranty period. Advanced lease revenue

Advanced lease revenue presented on the consolidated balance sheets represents advance payments the Company has received under a power purchase agreement. As the power purchase agreement is an operating lease, the advanced lease payments will be recorded as lease revenue on a straight-line basis over the 25-year term of the agreement. Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, trade receivables, reimbursable interconnection costs and derivative instruments. The Company's cash and cash equivalents are with high quality institutions. The Company has exposure to credit risk to the extent cash and cash equivalent balances, including restricted cash, exceed amounts covered by federal deposit insurance; however, the Company believes that its credit risk is immaterial. In addition, reimbursable interconnection costs are with large creditworthy utility companies and the Company's derivative instruments are placed with counterparties that are creditworthy institutions. The Company generally does not require collateral. Although PG&E and PREPA, offtakers for Hatchet Ridge and Santa Isabel, respectively, have filed for reorganization and debt restructuring, the Company has assessed and determined that trade receivables at Hatchet Ridge and Santa Isabel were not impaired as of December 31, 2018.

The table below presents significant customers who accounted for greater than 10% of total revenue, PREPA and PG&E for the years ended December 31, 2018, 2017 and 2016:

Year ended
December 31,
2018 2017 2016
RevenueRevenueRevenue

 Morgan Stanley Capital Group Inc.
 7.2
 %
 9.1
 %
 10.9
 %

 PG&E
 5.3
 %
 6.8
 %
 8.5
 %

 PREPA
 4.1
 %
 4.2
 %
 6.0
 %

 San Diego Gas & Electric
 12.2
 13.4
 %
 14.6
 %

 Southern California Edison Company
 11.9
 5.8
 %
 —
 %

Revenue Recognition

Beginning in 2018, the Company adopted ASC 606 Revenue Recognition (ASC 606). See Note 3, Revenue, regarding our revenue recognition policy. The Company sells electricity and related RECs under the terms of PSAs, PPAs or at market prices. Revenue is recognized based upon the amount of electricity delivered at rates specified under the contracts, or at market prices for spot market transactions, assuming all other revenue recognition criteria are met. When renewable energy credits are sold as a separate component, revenue is recognized at the time title to the energy credits is transferred to the buyer. Depending on the terms of the PSA, the Company may account for the contracts as operating leases pursuant to ASC 840, Leases (ASC 840), or derivative instruments pursuant to ASC 815, Derivatives

and Hedging (ASC 815). In considering ASC 840, it was determined that certain of the Company's PPAs are operating leases. ASC 840 requires minimum lease payments to be recognized over the term of the lease and contingent rents to be recorded when the achievement of the contingency becomes probable. All energy sales under the PPAs, which are considered leases, are contingent rent

due to the inherent uncertainty and variability associated with a fuel source (i.e., wind or solar) that is outside the control of the parties to the PPA. None of the operating leases have minimum lease payments; therefore, revenue from these contracts and any related renewable energy attributes are recognized as electricity sales when delivered. Contingent rents for the years ending December 31, 2018, 2017 and 2016 were approximately \$381 million, \$317 million and \$262 million, respectively. Contracts that meet the NPNS scope exception to derivative accounting are accounted for under the accrual method, where revenues are recorded in the period they are earned.

Energy derivative instruments that reduce exposure to changes in commodity prices may allow the Company to lock in a fixed price per megawatt hour (MWh) for a specified amount of annual electricity generation over the life of the swap contract. Monthly settlement amounts under energy hedges are accounted for as energy derivative settlements in the consolidated statements of operations. Changes in the fair value of energy hedges are recorded in electricity sales in the consolidated statements of operations.

The Company recognizes revenue for warranty settlements in other revenue upon resolution of outstanding contingencies. Any cash receipts for amounts subject to future adjustment or repayment are deferred in other liabilities until the final settlement amount is considered fixed and determinable.

Cost of Revenue

The Company's cost of revenue is comprised of direct costs of operating and maintaining its wind and solar project facilities, including labor, turbine service arrangements, land lease royalties, depreciation, accretion of asset retirement obligations, property taxes and insurance. These costs are recognized by the Company in the period in which they are incurred.

Stock-Based Compensation

The Company accounts for stock-based compensation related to stock options granted to employees by estimating the fair value of the stock-based awards using the Black-Scholes option-pricing model. The Black-Scholes option pricing model includes assumptions regarding dividend yields, expected volatility, expected option term, and risk-free interest rates. Expense is recognized by amortizing the fair value of the stock options granted using a straight-line method over the applicable vesting period. The Company estimates expected volatility based on the historical volatility of comparable publicly traded companies for a period that is equal to the expected term of the options. The risk-free interest rate is based on the U.S. treasury yield curve in effect at the time of grant for a period commensurate with the estimated expected term of the stock option. The expected term of options granted is derived using the "simplified" method as allowed under the provisions of the ASC 718, Compensation—Stock Compensation, and represents the period of time that options granted are expected to be outstanding.

The Company accounts for stock-based compensation related to restricted stock award grants and restricted stock unit grants by amortizing the fair value of the restricted stock award grants, which is the grant date market price, over the applicable vesting period. For certain restricted stock award grants, the Company measures the fair value at the grant date using a Monte Carlo simulation model and amortizes the fair value over the longer of the requisite period or performance period. The Monte Carlo simulation model includes assumptions regarding dividend yields, expected volatility, risk-free interest rates and initial total shareholder return (TSR) performance.

The Company accounts for forfeitures as they occur. The forfeitures are not material. Stock-based compensation expense is recorded as a component of general and administrative expenses in the Company's consolidated statements of operations.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date. The Company recognizes deferred tax assets to the extent that it believes these assets are more likely than not to be realized. In making such a determination, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning and results of recent operations. If the Company determines that it would be able to realize its deferred tax assets in the future in excess of their net

recorded amount, it would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes. The Company records uncertain tax positions in accordance with ASC 740, Income Taxes, on the basis of a two-step process whereby (1) it determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, it recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement

with the related tax authority. The Company has a policy to classify interest and penalties associated with uncertain tax positions together with the related liability, and the expenses incurred related to such accruals, if any, are included in the provision for income taxes.

Comprehensive Income (Loss)

Comprehensive income (loss) consists of net income (loss) and other comprehensive income (loss), net of tax. Other comprehensive income (loss), net of tax included in accumulated other comprehensive income (loss) in the consolidated statements of stockholders' equity, is comprised primarily of changes in foreign currency translation adjustments and the effective portion of changes in the fair value of derivatives designated as cash flow hedges. Foreign Currency Translation

The assets and liabilities of foreign subsidiaries, where the local currency is the functional currency, are translated from their respective functional currencies into U.S. dollars at the rates in effect at the balance sheet date and revenue and expense amounts are translated at average rates during the period, with resulting foreign currency translation adjustments recorded in other comprehensive income (loss), net of tax, in the consolidated statements of stockholders' equity and comprehensive income (loss). Where the U.S. dollar is the functional currency, re-measurement adjustments are recorded in other income (expense), net in the accompanying consolidated statements of operations. Segment Data and Geographic Information

Segment data

Operating segments are defined as components of a company about which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. The Company's chief operating decision maker is the chief executive officer. Based on the financial information presented to and reviewed by the chief operating decision maker in deciding how to allocate the resources and in assessing the Company's performance, the Company has determined it has two reportable segments: (i) the operating business segment, which is comprised of the portfolio of renewable energy power projects and (ii) the development investment, which consists of the Company's investment in Pattern Development.

Geographic information

The table below provides information, by country, about the Company's consolidated operations. Revenue is recorded in the country in which it is earned and assets are recorded in the country in which they are located (in millions):

	Revei	nue		Property, Plant and Equipment, no					
	Year	ended		December 31,					
	December 31,			December 31,					
	2018	2017	2016	2018	2017				
United States	\$346	\$315	\$285	\$ 3,124	\$ 3,121				
Canada	83	62	39	745	550				
Japan	33			250	_				
Chile ⁽¹⁾	21	34	30	_	294				
Total	\$483	\$411	\$354	\$ 4.119	\$ 3.965				

⁽¹⁾ The Company sold its interest in El Arrayán on August 20, 2018. See Note 4, Divested Operations.

Recently Adopted Accounting Standards

In August 2018, the Financial Accounting Standards Board (FASB) issued ASU 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (ASU 2018-15), which amends alignment of the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by these amendments. ASU 2018-15 is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The Company adopted ASU 2018-15 during the year ended December 31, 2018. The adoption did not have material impact on the Company's consolidated financial statements.

In February 2018, the FASB issued ASU 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (ASU 2018-02), which allows a reclassification from Accumulated Other Comprehensive Income (AOCI) to retained earnings for the stranded tax effects resulting from the Tax Cuts and Jobs Act in December 2017 (Tax Act). The amount of the reclassification is calculated as the difference between the amount initially recorded to other comprehensive income (OCI) at the time of the previously enacted tax rate that remains in AOCI and the amount that would have been recorded using the newly enacted tax rate. The Company adopted ASU 2018-02 in its financial statements for the period ended December 31, 2018 and elected not to reclassify the stranded tax effects related to the Tax Act. Furthermore, the U.S. operations are in a net deferred tax asset position offset by a full valuation allowance. As a result, the adoption did not have an impact on the Company's consolidated financial statements. The Company's accounting policy is to release stranded income tax effects from AOCI when the circumstances upon which the stranded tax effects are premised cease to exist.

In February 2017, the FASB issued ASU 2017-05, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASU 2017-05). This ASU is meant to clarify the scope of ASC Subtopic 610-20, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets and to add guidance for partial sales of nonfinancial assets. The Company adopted ASU 2017-05 as of January 1, 2018. The adoption did not have a material impact on the Company's consolidated financial statements and related disclosures.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes the revenue recognition requirements in Topic 605 "Revenue Recognition" (Topic 605) and requires entities to recognize revenue when control of the promised goods or services is transferred to customers at an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The Company adopted ASU 2014-09 as of January 1, 2018 using the modified retrospective transition method. The adoption did not have a material impact on the Company's consolidated financial statements, other than additional disclosures. See Note 3, Revenue for further details.

Recently Issued Accounting Standards Not Yet Adopted

In October 2018, the FASB issued ASU 2018-17, Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities (ASU 2018-17). ASU 2018-17 requires reporting entities to consider indirect interests held through related parties under common control on a proportional basis rather than as the equivalent of a direct interest in its entirety for determining whether a decision-making fee is a variable interest. The standard is effective for all entities for financial statements issued for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. Entities are required to apply the amendments in ASU 2018-17 retrospectively with a cumulative-effect adjustment to retained earnings at the beginning of the earliest period presented. The Company is currently evaluating this guidance to determine the impact it may have on its consolidated financial statements.

In October 2018, the FASB issued ASU 2018-16, Derivatives and Hedging (Topic ASC 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes (ASU 2018-16), which expands the list of U.S. benchmark interest rates permitted in the application of hedge accounting. Because of concerns about the sustainability of LIBOR, the Federal Reserve Board and the Federal Reserve Bank of New York (Fed) initiated an effort to introduce an alternative reference rate in the United States. The SOFR is calculated by the Fed based on the interest rates banks charge one another in the overnight market, typically called repurchase agreements, and because it is based on transactions in the open market, it is more reflective of market conditions than LIBOR, which relies on judgment. The provisions of ASU 2017-12 (discussed below) and ASU 2018-16 are effective for fiscal years beginning after December 15, 2018, including interim periods, with early adoption permitted. Initial adoption of ASU 2017-12 is required to be reported using a modified retrospective approach, with the exception of the presentation and disclosure requirements which are required to be applied prospectively. The Company is currently in the process of determining the impact of adoption of the provisions of ASU 2017-12 and ASU 2018-16.

In August 2018, the FASB issued ASU 2018-13, Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13), which amends changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of

measurement uncertainty which should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. ASU 2018-13 is effective for annual periods beginning after December 15, 2019, including interim periods within those periods. Early application is permitted. The Company is currently assessing the impact of changes to the disclosure requirements for fair value measurement. In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12), which amends the presentation and disclosure requirements and changes how companies assess effectiveness. The amendments are intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting, and increase transparency as to the scope and results of hedging programs. ASU 2017-12 is effective for annual periods beginning after December 15, 2018, including interim periods within those periods. The Company adopted the standard on January 1, 2019. ASU 2017-12

requires a modified retrospective transition method in which the Company will recognize the cumulative effect of the change on the opening balance of each affected component of equity in the statement of financial position as of the date of adoption. While the Company continues to assess all potential impacts of the standard, the adoption is not expected to have a material impact on its future consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments —Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. In November 2018, the FASB issued ASU 2018-19, Codification Improvements to Topic 326, Financial Instruments - Credit Losses, for the purposes of clarifying certain aspects of ASU 2016-13. ASU 2016-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The adoption of ASU 2016-13 is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (ASU 2016-02), as amended by subsequent ASUs, which requires lessees to recognize right-of-use assets and lease liabilities, for all leases, with the exception of short-term leases, at the commencement date of each lease. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 simplifies the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and liabilities. The Company adopted the new standard effective January 1, 2019 using a modified retrospective method and will not restate comparative periods. As permitted under the transition guidance, the Company may carry forward the assessment of whether its contracts contain or are leases, its lease classification, initial direct costs and remaining lease terms. The Company may also elect the practical expedient related to land easements, allowing the Company to carry forward its accounting treatment for land easements on existing agreements as its intangible assets; however, the accounting for future land easements may not be accounted for as intangibles. The Company has lease agreements with lease and non-lease components and will elect not to separate them and treat them as a single lease component. The Company will make an accounting policy election whereby short-term leases with an initial term of 12 months or less will not be recorded on the consolidated balance sheets. The Company anticipates that certain PPAs will no longer be accounted for as leases. The adoption of ASU 2016-02 may have a material impact on the Company's consolidated balance sheets, primarily related to land and office leases. The Company does not expect this standard to have a material impact on its consolidated statements of operations.

3. Revenue

The Company sells electricity and related RECs under the terms of PSAs or at market prices. Depending on the terms of the PSAs, the Company may account for the contracts as operating leases pursuant to ASC 840, derivative instruments pursuant to ASC 815 or contracts with customers pursuant to Topic 606 (as defined below). A majority of the Company's revenues are accounted for under ASC 840 or ASC 815.

On January 1, 2018, the Company adopted the new accounting standard ASC 606, Revenue from Contracts with Customers, and all the related amendments (Topic 606) and applied Topic 606 to its PSA contracts previously accounted for under Topic 605, using the modified retrospective method. Results of the reporting period beginning January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with the Company's historic accounting under Topic 605.

The Company did not record any adjustment to the opening retained earnings as of January 1, 2018 as a result of adopting Topic 606. Additionally, the adoption of Topic 606 does not materially change the presentation of revenue. Revenue Recognition

Revenues from contracts with customers are recognized when control of promised goods and services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

The following table presents the Company's total revenue recognized and, for revenue from contracts with customers, disaggregated by revenue sources (in millions):

	Year ended				
	December 31,				
	2018	$2017^{(1)}$	$2016^{(1)}$		
Revenue from contracts with customers					
Electricity sales					
Electricity sales under PSA	\$74	\$ 65	\$ 69		
Electricity sales to market	14	21	16		
REC sales	7	7	5		
Electricity sales from contracts with customers	95	93	90		
Other revenue					
Related party management service fees	8	7	5		
Other revenue from contracts with customers	8	7	5		
Total revenue from contracts with customers	103	100	95		
Other electricity sales (2)	369	309	257		
Other revenue	11	2	2		
Total revenue	\$483	\$ 411	\$ 354		

- (1) As noted above, prior period amounts have not been adjusted under the modified retrospective method.
- (2) Includes revenue from PSAs accounted for as leases and energy hedge contracts.

Electricity Sales

The Company generates revenues primarily by delivering electricity to customers under PSAs and market participants. The revenues are primarily determined by the price of the electricity under the PSAs or market price multiplied by the amount of electricity that the Company delivers.

The Company transfers control of the electricity over time and the customer simultaneously receives and consumes the benefits provided by the Company's performance as it performs. Accordingly, the Company has concluded that the sale of electricity over the term of the agreement represents a series of distinct goods that are substantially the same and that have the same pattern of transfer to the customer. Each distinct transfer of electricity in MWh that the Company promises to transfer to the customer meets the criteria to be a performance obligation satisfied over time. The electricity sales are recognized based on an output measure, as each MWh is delivered to the customers. The Company recognizes revenue based on the amount metered and invoiced on the basis of the contract prices multiplied by MWh delivered. The Company does not determine the total transaction price at contract inception, allocate the transaction price to performance obligations, or disclose the value of the variable portion of the remaining performance obligations for contracts for which it recognizes revenue as invoiced.

Renewable Energy Credits Sales

Each promise to deliver RECs is a distinct performance obligation that is satisfied at a point in time as none of the criteria are met to account for such promise as performance obligation satisfied over time. The Company either delivers RECs with electricity under PSAs or on a standalone basis (in a contract that does not include electricity). When RECs are sold on a standalone basis, the revenue related to the RECs is recognized at the point in time at which control of the energy credits is transferred to customers. RECs delivered under PSAs with electricity are immaterial in the context of the contracts with customers and therefore not separately accounted for.

Remaining performance obligations represent the transaction price of standalone RECs for which RECs have not been delivered to the customer's account. The transaction price is determined on the basis of the stated contract price multiplied by RECs to be delivered. As of December 31, 2018, approximately \$20 million of revenue is expected to be recognized from remaining performance obligations associated with existing contracts for the standalone sale of RECs. The Company expects to recognize revenue on approximately 61% of these remaining performance obligations over the next 24 months, with the balance recognized thereafter.

Related Party Management Service Fees

Related party revenue management service fees represent revenue recognized from the services provided by the Company, under Management, Operations and Maintenance Agreements (MOMAs) and Project Administration Agreements (PAAs) with certain wind farms that are consolidated subsidiaries of Pattern Development Companies or entities the Company accounts for as equity investments. Under these agreements, the Company provides services to the various wind farms, typically for a fixed annual fee payable in monthly installments, which escalates with the consumer price index (CPI) on an annual basis. The services provided by the Company to the wind farm under the agreement each month represent a single performance obligation, which is delivered to the project over time and is invoiced at a fixed price per month and will be recognized over time as invoiced to the respective wind farm. Remaining performance obligations represent the fixed monthly installments for which services have not been performed. The transaction price is determined on the basis of the stated contract price.

Transaction Price Allocated to the Remaining Performance Obligations

The Company expects to recognize revenue under PSAs and related party management service fees in the following amounts related to fixed consideration associated with remaining performance obligations in each of the future periods noted as of December 31, 2018 (in millions):

	Amount
2019	\$ 79
2020	66
2021	67
2022	67
2023	67
Thereafter	276
Total	\$ 622
	_

Contract Balances

The Company did not record any contract assets as none of its right to payment was subject to something other than passage of time. The Company also did not record any contract liabilities as it recognizes revenue only at the amount to which it has the right to invoice for the electricity and RECs delivered; therefore, there are no advanced payments or billings in excess of electricity or RECs delivered.

4. Divested Operations

Chilean Sale

On May 21, 2018, the Company, through its indirect wholly-owned subsidiaries, entered into a stock purchase agreement with a third party pursuant to which the Company agreed to sell, and the buyer agreed to purchase, certain subsidiaries which hold approximately a 71% interest in El Arrayán Wind and assets and rights relating to ownership and operation of an extension of the trunk transmission system in Chile (Chilean Sale). El Arrayán Wind is a wind electric generation facility located approximately 400 kilometers north of Santiago on the coast of Chile in which the Company had an owned interest of approximately 81 megawatts (MW).

On August 20, 2018, the Company completed the Chilean Sale for cash proceeds of \$70 million. The Company measured impairment expense as the difference between the carrying amount of the net assets and fair value less estimated costs to sell. As a result, the Company recorded a total impairment expense of \$7 million for the year ended December 31, 2018 in the consolidated statements of operations.

The operating results of El Arrayán Wind were included on the consolidated statements of operations through the date of sale.

5. Acquisitions

All acquisitions completed during 2018 and 2017 were in alignment with the Company's strategy to expand its portfolio of power generating projects.

Stillwater Acquisition

On November 20, 2018, a subsidiary of the Company acquired 100% of Stillwater Wind LLC, an 80 MW wind project located in Stillwater County, Montana, for a total consideration of \$111 million, net of cash acquired, in addition to \$1 million of capitalized transaction-related expenses. PSP Investments and Allianz Renewable Energy Partners of America, LLC, whom are noncontrolling interests, contributed \$95 million of the total consideration. The fair value of the purchase consideration, including transaction-related expenses of the asset acquisition, is allocated to the relative fair value of the individual assets, operating contracts and liabilities assumed. No gain or loss was recognized upon acquisition.

MSM Acquisition

On August 10, 2018, the Company subscribed for (1) a 51% limited partnership interest in MSM LP Holdings LP, which holds 99.98% of the economic interests in MSM. MSM operates the approximately 143 MW wind project located in the Chaudière-Appalaches region south of Québec City, Canada, which achieved commercial operation in the first quarter of 2018. The Company also acquired (1) 70% of the issued and outstanding shares in the capital of Pattern MSM GP Holdings Inc. and (2) 70% of the issued and outstanding shares in the capital of Pattern Development MSM Management ULC from Pattern Energy Group LP for aggregate consideration of \$31 million, net of cash acquired.

MSM was determined to be a VIE, for which the Company is the primary beneficiary. The Company recorded the fair value of the individual assets, operating contracts and liabilities of the VIE, which did not meet the definition of a business. The noncontrolling interest was recorded at fair value estimated using the purchase price paid by PSP Investments pursuant to the purchase and sale agreement. No gain or loss was recognized upon acquisition. The Company incurred transaction-related expenses of \$1 million which were recorded in net earnings (loss) on transactions in the consolidated statements of operations for the year ended December 31, 2018.

Japan Acquisitions

On March 7, 2018, the Company acquired (1) Tsugaru Holdings, which owns a 122 MW wind project company located in Aomori Prefecture, Japan that is expected to commence commercial operations in early to mid-2020; (2) Ohorayama, a 33 MW wind project company located in Kochi Prefecture, Japan that commenced commercial operations in March 2018; (3) Kanagi, a 10 MW solar project company located in Shimane Prefecture, Japan that commenced commercial operations in 2006; (4) Otsuki, a 12 MW wind project company located in Kochi Prefecture, Japan that commenced commercial operations in 2006; and (5) Futtsu, a 29 MW solar project company located in Chiba Prefecture, Japan that commenced commercial operations in 2016 (collectively referred to as the Japan Acquisition) for total consideration of \$264 million, net of cash acquired, of which \$106 million is a contingent payment. As part of the acquisition, the Company also assumed \$181 million of debt. The Company incurred transaction related expenses of \$1 million which were recorded in net earnings (loss) on transactions in the consolidated statements of operations for the year ended December 31, 2018.

Contingent purchase consideration with a fair value of \$103 million, subject to foreign currency exchange rate changes, is contingent upon term conversion of the Tsugaru construction loan or the commencement of commercial operations of Tsugaru. Both the term loan conversion and commencement of commercial operations are expected to occur in 2020. Upon the term conversion of the Ohorayama construction loan in June 2018, the Company was obligated to make a \$3 million payment, subject to foreign currency exchange rate changes, to Pattern Energy Group LP. The Company paid this consideration in July 2018. See Note 14, Fair Value Measurement for further discussion on the fair value of the contingent consideration. The Company recorded the fair value of the individual assets, operating contracts and assumed liabilities of the Japan acquisition. The noncontrolling interest was recorded at fair value estimated using a projected cash flow stream of distributable cash, discounted to present value with a discount rate reflecting the cost of equity adjusted for control premium. Deferred tax liabilities were established as part of acquisition accounting due to temporary tax to book basis differences as a result of the step up in fair value related to property, plant and equipment, which established goodwill for \$60 million. The valuation of certain assets and liabilities in the Japan Acquisition is final as of December 31, 2018. The Japan Acquisition provides the Company

with an established presence in Japan to support future growth plans and provides diversification which is of benefit to the risk profile of the Company's overall operating project portfolio.

As a result of the Japan Acquisition, for the year ended December 31, 2018, property, plant and equipment, net, increased by \$7 million, construction in progress decreased by \$3 million, other assumed liabilities increased by \$6 million and deferred tax liabilities decreased by \$2 million from the preliminary purchase price allocation primarily related to a change in the estimated cost of asset retirement obligations and deferred tax liabilities. Broadview Acquisition

On April 21, 2017, the Company completed the acquisition of (1) a 99% ownership interest in Western Interconnect, a 35-mile 345 kV transmission line; and (2) a 100% ownership interest in Broadview Project which indirectly owns 100% of the Class B membership interest in Broadview Energy Holdings LLC (Broadview Holdings), which consists of the 324 MW Broadview wind power projects, for total consideration of \$190 million, net of cash acquired and a post-closing payment of approximately \$21 million contingent upon the commercial operation of the Grady Project. The Grady Wind Energy Center, LLC (the Grady Project) is a wind power project on the Identified ROFO Projects list being developed by Pattern Development. The identifiable assets, operating contracts and liabilities assumed for the Broadview Project were recorded at their fair values, which corresponded to the sum of the cash purchase price, contingent consideration payment, and the fair value of the other investors' noncontrolling interests.

Meikle Acquisition

On August 10, 2017, the Company acquired (1) a 50.99% limited partnership interest in Meikle, a 179 MW wind project company located in the Peace River Regional District of British Columbia, Canada, which achieved commercial operations in the first quarter of 2017; and (2) 70% of the issued and outstanding shares of Meikle Wind Energy Corp. for a total consideration of \$58 million, net of cash acquired, in addition to \$1 million of capitalized transaction-related expenses. The fair value of the purchase consideration, including transaction-related expenses of the asset acquisition, and fair value of the noncontrolling interest was allocated to the relative fair value of the individual assets, operating contracts and liabilities assumed. The noncontrolling interest was recorded at fair value estimated using the purchase price paid by the affiliate of PSP Investments pursuant to the purchase and sale agreement.

December 31

The aggregate purchase prices of the acquisitions were allocated as follows (in millions):

December 31,				
2018			2017 Broadv Me ikle ⁽²⁾	
Japan MSM(2) Stillweter(2)				
Acquisition Sunwater 2				
\$158	\$ 31	\$ 111	\$169	\$ 58
106	_	_	21	_
\$264	\$ 31	\$ 111	\$190	\$ 58
\$269	\$ 270	\$ 120	\$628	\$ 376
179				
103			22	29
60	_	_		_
20	38	4	12	8
(181)	(196)		(51)	(266)
(65)	_			
	(29)			
(110)	(14)	(13)	(95)	(24)
275	69	111	516	123
(11)	(38)		(326)	(65)
\$264	\$ 31	\$ 111	\$190	\$ 58
	2018 Japan Acqui \$158 106 \$264 \$269 179 103 60 20 (181) (65) — (110) 275 (11)	2018 Japan MSM(2) Acquisition(1) \$158 \$ 31 106 — \$264 \$ 31 \$269 \$ 270 179 — 103 — 60 — 20 38 (181) (196) (65) — — (29) (110) (14) 275 69 (11) (38)	2018 Japan MSM(2) Acquisition(1) \$158 \$31 \$111 106 — — \$264 \$31 \$111 \$269 \$270 \$120 179 — — 103 — — 20 38 4 (181) (196) — (65) — — (29) — (110) (14) (13) 275 69 111 (11) (38) —	2018 2017 Japan Acquisition(1) Stillwater(2) Broad Acquisition(2) \$158 \$31 \$111 \$169 106 — — 21 \$264 \$31 \$111 \$190 \$269 \$270 \$120 \$628 179 — — — — — 103 — — 22 — 60 — — — — — 20 38 4 12 (181) (196) — (51) (65) — — — — — — (29) — — — (110) (14) (13) (95) (326)

¹⁾ Business Combination

²⁾ Asset Acquisition

Supplemental pro forma data (unaudited)

Ohorayama commenced operations in March 2018 and until approximately one week before the Company's acquisition, Ohorayama was still under construction. In addition, Tsugaru is expected to commence commercial operations in early to mid-2020. Therefore, pro forma data for Ohorayama and Tsugaru have not been provided as there is no material difference between pro forma data that give effects to the Japan Acquisitions as if it had occurred on January 1, 2017 and the actual data reported for the years ended December 31, 2018 and 2017.

Broadview reached commercial operations in March 2017 and until approximately three weeks before acquisition, Broadview was still under construction. Therefore, pro forma data for Broadview has not been provided as there is no material difference between pro forma data that give effect to the Broadview Project acquisition as if it had occurred on January 1, 2016 and actual data reported for the years ended December 31, 2017 and 2016.

The unaudited pro forma statement of operations data below gives effect to the acquisition of Kanagi, Otsuki and Futtsu as if they had occurred on January 1, 2017. The pro forma net loss for the year ended December 31, 2018 was adjusted to exclude nonrecurring transaction related expenses of \$1 million. The unaudited pro forma data is presented for illustrative purposes only and is not intended to be indicative of actual results that would have been achieved had these acquisitions been consummated as of January 1, 2017. The unaudited pro forma data should not be considered representative of the Company's future financial condition or results of operations.

r ear ended
December 31,
2018 2017
\$487 \$435
556 520
(69) (85)
(211) (65)
\$142 \$(20)

The following table presents the amounts included in the consolidated statements of operations for the business combinations discussed above since their respective dates of acquisition:

	Year ended			
	Dece	ber 3	1,	
Unaudited data (in millions)	2018		2017	7
Total revenue	\$ 96		\$ 33	
Total expenses	105		50	
Net loss	(9)	(17)
Less: net loss attributable to noncontrolling interest	(48)	(17)
Net income attributable to Pattern Energy	\$ 39		\$ —	

6. Property, Plant and Equipment

The following presents the categories within property, plant and equipment (in millions):

C I	_			•
	D	ecembe	er 31,	
	20	018	2017	
Operating wind farms	\$	4,972	\$4,641	
Transmission line	94	4	94	
Furniture, fixtures and equipm	ent 1	6	12	
Subtotal	5,	,082	4,747	
Less: accumulated depreciatio	n (9	963)	(782)
Property, plant and equipment	, net \$	4,119	\$3,965	

The Company recorded depreciation expense related to property, plant and equipment of \$245 million, \$195 million and \$172 million for the years ended December 31, 2018, 2017 and 2016, respectively.

7. Intangible Assets and Liabilities and Goodwill

The following presents the major components of the long-lived intangible assets and liabilities (in millions):

	December 31, 2018					
	Weighted Average Remaining Life	Gross		Accumulated Amortization		Net
Intangible assets						
Power purchase agreement	15	\$225	\$	(31))	\$194
Industrial revenue bond tax savings	23	13	(1))	12
Other intangible assets	33	14	(1))	13
Total intangible assets		\$252	\$	(33))	\$219
Intangible liabilities						
Power purchase agreement	14	60	(13	3))	47
Leasehold interest	22	9	_			9
Total intangible liabilities		\$69	\$	(13))	\$56
· ·	December 31, 2017					
	Weighted Average Remaining Life	Gross		cumulated nortization		Net
Intangible assets						
Power purchase agreement	15	\$127	\$	(18))	\$109
Industrial revenue bond tax savings	24	13	_			13
Other intangible assets	34	15	(1))	14
Total intangible assets		\$155	\$	(19))	\$136
Intangible liability						
Power purchase agreement	15	\$60	\$	(9))	\$51

Amortization of the PPA asset and PPA liability is reflected in electricity sales in the consolidated statements of operations, which resulted in net reduction of approximately \$9 million, \$4 million and \$3 million in electricity sales for the years ended December 31, 2018, 2017 and 2016, respectively. For the years ended December 31, 2018, 2017 and 2016, the Company recorded amortization expense of less than \$1 million related to other intangible assets in depreciation, amortization and accretion in the consolidated statements of operations.

As a result of the Japan Acquisition, the Company recorded a \$103 million intangible PPA asset resulting from market prices that are lower than the contractual prices. In addition, the Company recorded a \$9 million intangible leasehold interest liability, as a result of higher market prices compared to the contractual prices.

As part of the 2017 Broadview acquisition, the Company acquired an intangible asset related to future property tax savings resulting from the issuance of industrial revenue bonds during construction of the project.

The following table presents estimated future amortization for the next five years related to intangible assets and liabilities. The sum of estimated future amortization in the following table may differ from intangible assets and liabilities balances due to rounding.

	Pow	er	Indu	ıstria	lOtha			
Year ended December 31,	Purchase		reve	revenue Other			Leasehol	
Tear chief December 31,	Agr	eements,	bon	d tax		igible	Inter	est
	Net		savi	ngs	Asse	is		
2019	\$	10	\$	1	\$	1	\$	
2020	10		1		1			
2021	10		1		1		—	
2022	10		1		1		—	
2023	10		1		1		—	
Thereafter	101		9		10		(7)

Goodwill

In connection with the Japan Acquisition, the Company recognized goodwill of approximately \$60 million, which was allocated to the operating business reporting segment.

The following table presents a reconciliation of the beginning and ending carrying amounts of goodwill (in millions):

	1 otai
Balances at December 31, 2017	\$ —
Net additions during the period	60
Foreign currency translation adjustment	(2)
Balances at December 31, 2018	\$58

8. Variable Interest Entities

The Company consolidates VIEs in which it holds a variable interest and is the primary beneficiary. The Company has determined that Logan's Gap, Panhandle 1, Panhandle 2, Post Rock, Amazon Wind, Broadview Energy Holdings LLC (a subsidiary of Broadview Project), MSM, and Stillwater New Energy Holdings LLC are VIEs and as the managing member of the respective partnerships, it is the primary beneficiary by reference to the power and benefits criterion under ASC 810, Consolidation. The Company considered responsibilities within the contractual agreements, which grant it the power to direct the activities of the VIE that most significantly impact the VIE's economic performance. Such activities include management of the wind farms' operations and maintenance, budgeting, and establishing policies and procedures. In addition, the Company has the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIEs on the basis of the income allocations and cash distributions. The Company's equity method investment in Pattern Development is considered to be a VIE primarily because the total equity at risk is not sufficient to permit Pattern Development to finance its activities without additional subordinated financial support by the equity holders. The Company does not hold the power or benefits to be the primary beneficiary and does not consolidate the VIE. The carrying value of its unconsolidated investment in Pattern Development was \$144 million as of December 31, 2018. The Company's maximum exposure to loss is equal to the carrying value of its investment in Pattern Development.

The following table summarizes the carrying amounts of major consolidated balance sheet items for consolidated VIEs as of December 31, 2018 and 2017 (in millions). All assets (excluding deferred financing costs, net and long-lived intangible assets, net) and liabilities included in the consolidated VIE presented below are (1) assets that can be used only to settle obligations of the VIE or (2) liabilities for which creditors do not have recourse to the general credit of the primary beneficiary.

g, 22222	December 2018	ber 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	\$36	\$33
Restricted cash	4	4
Trade receivables	13	13
Prepaid expenses	6	5
Other current assets	2	3
Total current assets	61	58
Restricted cash	3	3
Construction in progress	1	
Property, plant and equipment, net	2,156	1,985
Deferred financing costs, net	2	2
Intangible assets, net	12	12
Other assets	12	13
Total assets	\$2,247	\$2,073
Liabilities		
Current liabilities:		
Accounts payable and other accrued liabilities	\$27	\$27
Accrued construction costs	1	1
Current portion of long-term debt, net	4	
Other current liabilities	5	5
Total current liabilities	37	33
Long-term debt, net	149	
Intangible liability, net	48	51
Asset retirement obligations	57	22
Other long-term liabilities	36	25
Deferred revenue	26	
Total liabilities	\$353	\$131

9. Unconsolidated Investments

The Company's unconsolidated investments consist of the following for the periods presented below (in millions):

	Dagam	ber 31,	Percen	tage o	of Owne	ership
	Decen	1001 31,	Decem	ber 3	1,	
	2018	2017	2018		2017	
South Kent	\$ 5	\$6	50.0	%	50.0	%
Grand	5	7	45.0	%	45.0	%
K2		103		%	33.3	%
Armow	116	133	50.0	%	50.0	%
Pattern Development	144	62	29.3	%	20.9	%
Unconsolidated investments	s \$ 270	\$311				

K2

On November 6, 2018, the Company, through its indirect wholly-owned subsidiary, entered into a PSA for the sale of its minority interest in the K2 project. The Company had an owned interest of approximately 90 MW. On December 31, 2018, the Company completed the sale of the K2 project for cash proceeds of approximately \$158 million and recorded a gain on sale of approximately \$71 million, which is included in net earnings (loss) on transactions in the statements of operations for the year ended December 31, 2018.

South Kent

The Company is a noncontrolling investor in a joint venture established to develop, construct, and own a wind power project located in Ontario, Canada. The project has a 20-year PPA, and commenced commercial operation in March 2014.

Grand

The Company is a noncontrolling investor in a joint venture established to develop, construct, and own a wind power project located in Ontario, Canada. The project has a 20-year PPA and commenced commercial operation in December 2014.

Armow

The Company is a noncontrolling investor in a joint venture established to develop, construct, and own a wind power project located in Ontario, Canada. The project has a 20-year PPA, and commenced commercial operation in December 2015.

Pattern Development

Under the Second Amended and Restated Agreement of Limited Partnership of Pattern Development, the Company has the right to contribute up to \$300 million to Pattern Development in order to secure and retain up to a 29% ownership interest in the partnership. On July 27, 2017, the Company funded an initial \$60 million capital call. As of December 31, 2018, the Company has funded approximately \$183 million in aggregate and holds an approximately 29% ownership interest in Pattern Development. The Company is a noncontrolling investor in Pattern Development, but has significant influence over Pattern Development. Accordingly, the investment is accounted for under the equity method of accounting.

The Company capitalized approximately \$2 million of transaction costs for the year ended December 31, 2017. The Company's initial investment in Pattern Development of \$60 million was approximately \$41 million higher than the Company's underlying equity in the net assets of Pattern Development at the time of the initial funding. This equity method basis difference was primarily attributable to equity method goodwill.

Basis Amortization of Unconsolidated Investments

The cost basis of the net assets of the investment may be different than the Company's proportional interest in the equity of the investee. On the acquisition date, the Company determines the fair value of the identifiable assets and assumed liabilities in accordance with ASC 805, Business Combinations. The resulting fair values are compared with the assets and liabilities recorded in the investee's financial statements, and the resulting difference is basis difference. Basis differences for the Company's investments were primarily attributable to property, plant and equipment, PPAs, and equity method goodwill. The Company amortizes the basis difference attributable to property, plant and equipment, and PPAs over their useful life and contractual life, respectively. The Company does not amortize equity method goodwill. For the years ended December 31, 2018, 2017 and 2016, the Company recorded basis difference amortization for its unconsolidated investments of approximately \$11 million, \$11 million and \$6 million, respectively, in earnings in unconsolidated investments, net on the consolidated statements of operations.

10. Debt The Company's debt consists of the following for periods presented below (in millions):

The company is deat consists of the following for period	s present	ca ociow		mber 3		8	
	Decemb		ractual				
			Intere		Intere		
	2018	2017	Rate				Maturity
Corporate-level							
Corporate Revolving Credit Facility	\$198	\$—	varie	s (1)	4.01	%	November 2022
2020 Notes	225	225	4.00	%	6.60	%	July 2020
2024 Notes	350	350	5.88	%	5.88	%	February 2024
Project-level							•
Fixed interest rate							
El Arrayán EKF term loan (6)	_	99		%		%	N/A
Santa Isabel term loan	100	104	4.57	%	4.57	%	September 2033
Mont Sainte Marguerite-Med Term Loan	62		3.97	%	3.97	%	December 2029
Mont Sainte Marguerite-Long Term loan	93		5.04	%	5.04	%	June 2042
Variable interest rate							
Japan Credit Facility	25	_	varie	s (5)	1.82	%	August 2022
Ocotillo commercial term loan	281	289	4.30	%	4.01	% (3)	June 2033
El Arrayán commercial term loan (6)		90	_	%		%	N/A
Spring Valley term loan (6)		126	_	%		%	N/A
St. Joseph term loan (2)	152	172	4.06	%	4.11	% (3)	November 2033
Western Interconnect term loan (7)	52	54	4.19	%	4.21	% (3)	May 2034
Meikle term loan (2)	239	267	3.81	%	3.97	% (3)	May 2024
Futtsu term loan	75		1.07	%	1.85	% (3)	December 2033
Ohorayama term loan	93		0.87	%	0.88	% (3)	February 2036
Tsugaru Construction Loan	131	_	0.72	%	0.72	% (3)	March 2038
Tsugaru Holdings Loan Agreement	59		3.07	%	3.07	%	July 2022
Imputed interest rate							
Hatchet Ridge financing lease obligation	180	192	1.43	%	1.43	%	December 2032
	2,315	1,968					
Unamortized premium/discount, net (4)	(11)	(14)					
Unamortized financing costs	(21)	(23)					
Total debt, net	\$2,283	\$1,931					
A CL . 1 . 1 . 1 . 1 . 1 . 1							
As reflected on the consolidated balance sheets	ф 1 O O	ф					
Revolving credit facility, current	\$198	\$ —					
Revolving credit facility	25						
Current portion of long-term debt, net of financing costs		52					
Long term debt, net of financing costs	2,004	1,879					
Total debt, net	\$2,283	\$1,931					

⁽¹⁾ Refer to Corporate Revolving Credit Facility for interest rate details.

⁽²⁾ The amortization for the St. Joseph term loan and the Meikle term loan are through September 2036 and December 2038, respectively, which differs from the stated maturity date of such loans due to prepayment requirements.

⁽³⁾ Includes impact of interest rate swaps. See Note 12, Derivative Instruments, for discussion of interest rate swaps.

⁽⁴⁾ The discount relates to the 2020 Notes and MSM term loans.

⁽⁵⁾ Refer to Japan Credit Facility for interest rate details.

- (6) The El Arrayán EKF term loan and El Arrayán commercial term loan were included as part of the Chilean Sale on August 20, 2018. The Spring Valley term loan was prepaid in full on December 31, 2018.
- (7) Refer to "Project Debt Western Interconnect" below for additional borrowing details.

The following are principal payments, excluding deferred financing costs, due under the Company's debt as of December 31, 2018 for the following years (in millions):

	Amount
2019	\$ 254
2020	288
2021	74
2022	154
2023	73
Thereafter	1,472
Total	\$ 2,315

Interest and commitment fees incurred and interest expense for debt consisted of the following (in millions):

	y ear ended		
	Decen	l,	
	2018	2017	2016
Corporate-level interest and commitment fees incurred	\$38	\$34	\$ 18
Project-level interest and commitment fees incurred	64	55	48
Capitalized interest, commitment fees, and letter of credit fees	(4)	_	
Amortization of debt discount/premium, net	5	5	4
Amortization of financing costs	6	8	7
Other interest		_	1
Interest expense	\$109	\$102	\$ 78

Corporate Level Debt

Corporate Revolving Credit Facility

On November 21, 2017, certain of our subsidiaries entered into a Second Amended and Restated Credit and Guaranty Agreement (the Revolving Credit Facility). The Revolving Credit Facility provides for a revolving credit facility of \$440 million, decreased from the previous limit of \$500 million. The facility has a five-year term and is comprised of a revolving loan facility, a letter of credit facility and a swingline facility. The facility is secured by pledges of the capital stock and ownership interests in certain of our holding company subsidiaries, in addition to other customary collateral.

As of December 31, 2018, \$197 million was available for borrowing under the \$440 million Revolving Credit Facility. The Revolving Credit Facility contains a broad range of covenants that, subject to certain exceptions, restrict the Company's holding company subsidiaries' ability to incur debt, grant liens, sell or lease assets, transfer equity interests, dissolve, pay distributions and change its business. As of December 31, 2018, the Company's holding company subsidiaries are in compliance with covenants contained in the Revolving Credit Facility.

The loans under the Revolving Credit Facility are base rate loans, Eurodollar rate loans, Canadian prime rate loans or CDOR rate loans. The base rate loans accrue interest at the fluctuating rate per annum equal to the greatest of the (i) the U.S. dollar prime rate, (ii) the federal funds rate plus 0.50% and (iii) LIBOR one month plus 1.0%, plus an applicable margin ranging from 0.625% to 0.875% (corresponding to applicable leverage ratios of the borrowers). The Eurodollar rate loans accrue interest at a rate per annum equal to LIBOR, as published by Reuters plus an applicable margin ranging from 1.625% to 1.875% (corresponding to applicable leverage ratios of the borrowers). The Canadian prime rate loans accrue interest at a fluctuating rate per annum equal to the greater of (i) the Canadian dollar prime rate and (ii) the average CDOR rate for a 30 day term plus 0.50%, plus an applicable margin ranging from 0.625% to 0.875% (corresponding to applicable leverage ratios of the borrowers). The CDOR rate loans accrue interest at a rate per annum equal to CDOR, as published by Reuters plus an applicable margin ranging from 1.625% to 1.875% (corresponding to applicable leverage ratios of the borrowers). Under the facility, the Company pays a revolving commitment fee equal to a percentage per annum determined by reference to the leverage ratio of the borrowers, ranging from 0.30% to 0.50%. Letter of credit fees are also paid.

As of December 31, 2018 and 2017, letters of credit of \$45 million and \$48 million, respectively, were available to be issued under the Revolving Credit Facility.

2020 Notes

In July 2015, the Company issued \$225 million aggregate principal amount of 4.00% convertible senior notes due 2020 (2020 Notes). The 2020 Notes bear interest at a rate of 4.00% per year, payable semiannually in arrears on January 15 and July 15 of each year, beginning on January 15, 2016. The 2020 Notes will mature on July 15, 2020. The 2020 Notes were sold in a private placement. Upon conversion, the Company may, at its discretion, pay cash, shares of the Company's Class A common stock, or a combination of cash and stock. The 2020 Notes were set at an initial conversation rate of 35.4925 shares of Class A common stock per \$1,000 principal amount of 2020 Notes, which is equivalent to an initial conversion price of approximately \$28.175 per share of Class A common stock. The conversion rate is subject to adjustment in some events (including, but not limited to, certain cash dividends made to holders of the Company's Class A common stock which exceed the initial dividend threshold of \$0.363 per quarter per share). The conversion rate would be adjusted to offset the effect of the portion of the dividend in excess of \$0.363, provided that the adjustment would result a change of at least 1% in the then effective conversion rate. During the year ended December 31, 2017, the conversion rate increased to 35.8997 shares of Class A common stock per \$1,000 principal amount of 2020 Notes. The conversion rate will not be adjusted for any accrued and unpaid interest. The 2020 Notes are not redeemable prior to maturity.

The 2020 Notes are guaranteed on a senior unsecured basis by a subsidiary of the Company and are general unsecured obligations of the Company. The obligations rank senior in rights of payment to the Company's subordinated debt, equal in right of payment to the Company's unsubordinated debt and effectively junior in right of payment to any of the Company's secured indebtedness to the extent of the value of the assets securing such indebtedness.

The following table presents a summary of the equity and liability components of the 2020 Notes (in millions):

December				
31,				
2018 20			2017	
\$225	5	\$22	5	
(8)	(13)	
(2)	(3)	
\$215	5	\$20	9	
	31, 2018 \$225 (8) (2)	31, 2018 \$225 (8) (2)	31,	

Carrying value of the equity component (1) \$24 \$24

(1) Included in the consolidated balance sheets as additional paid-in capital, net of \$1 million in equity issuance costs. Project Debt

The Company typically finances its wind projects through project entity specific debt secured by each project's assets with no recourse to the Company. Typically, these financing arrangements provide for a construction loan, which upon completion may be converted into a term loan or repaid through capital contributions from the Company and tax equity investors.

Collateral for project level facilities typically include each project's tangible assets and contractual rights and cash on deposit with the depository agents. Each loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict each project's ability to incur debt, grant liens, sell or lease certain assets, transfer equity interests, dissolve, make distributions and change their business. As of December 31, 2018, all projects were in compliance with their financing covenants.

Western Interconnect

In December 2018, the Company refinanced Western Interconnect project's term loan of \$52 million along with an associated letter of credit of \$4 million and entered into a new term loan with a total loan capacity of \$90 million expected to mature in May 2034 with an associated letter of credit of \$5 million. The incremental borrowing of \$38 million is anticipated to occur during the second quarter of 2019. The refinancing was treated as an extinguishment of debt for which the Company recognized a loss on extinguishment of debt of \$2 million in other income (expense), net on the consolidated statements of operations for the year ended December 31, 2018. The \$2 million loss on

extinguishment includes \$1 million paid to existing lenders.

Spring Valley

In December 2018, the Company prepaid 100% of the outstanding balance of the Spring Valley project's term loan of \$119 million. A \$4 million loss on the debt extinguishment was recorded in other income (expense), net in the consolidated statements of operations, primarily due to expensing previously recorded amounts in deferred financing costs. As a result of the early extinguishment of debt, the Company lost its cash flow hedge accounting treatment on the related interest rate swaps. See Note 12, Derivative Instruments, for additional information.

Japan Credit Facility

In August 2018, GPG entered into a credit agreement for a revolving credit facility (the Japan Credit Facility). Under the Japan Credit Facility, GPG may borrow up to \$32 million and the Japan Credit Facility matures in August 2022. The base rate is based on the Japan Credit Facility Tokyo Interbank Offered Rate (TIBOR) plus an applicable margin between 1.75% and 2.25% plus an annual commitment fee of 0.30%. As of December 31, 2018, \$7 million was available for borrowing.

Tsugaru Facility

In March 2018, Tsugaru entered into a credit agreement for a construction facility (Tsugaru Construction Loan), a term facility, a letter of credit facility (the LC Facility) and a Japanese consumption tax facility (the JCT Facility) (collectively, the Tsugaru Facility). Under the Tsugaru Facility, up to \$371 million may be borrowed to fund the construction of Tsugaru which automatically converts to a term facility upon the earlier of completion of construction of the project (expected to be March 2020) or September 2020 (the Term Conversion Date). The Tsugaru Construction Loan, including the term facility and LC Facility, mature 18 years following the Term Conversion Date, not later than March 2039. The interest rate on the Tsugaru Construction Loan and term facility is TIBOR plus 0.65%. The LC Facility establishes a \$20 million debt service reserve account letter of credit and an \$8 million operations and maintenance reserve account letter of credit with amounts outstanding under the letters of credit owing interest at a rate of 1.10% and fees on the undrawn amounts of 0.30%. The JCT Facility provides for up to \$34 million to pay Japanese consumption taxes arising from payment of project costs, with an interest rate of TIBOR plus 0.30% and a maturity date corresponding to the Term Conversion Date. A commitment fee of 0.3% is owed on any available amounts under the Construction Facility and the JCT Facility and on any undrawn amounts on the letters of credit up to the Term Conversion Date. Collateral for the credit facility includes Tsugaru's tangible assets and contractual rights and cash on deposit with the depository agent. The credit agreement contains a broad range of covenants that, subject to certain exceptions, restrict Tsugaru's ability to incur debt, grant liens, sell or lease certain assets, transfer equity interests, dissolve, make distributions or change its business. As of December 31, 2018, outstanding borrowings under the Tsugaru Construction Loan totaled \$131 million.

Tsugaru Holdings Loan Agreement

In March 2018, Tsugaru Holdings entered into a loan agreement (Tsugaru Holdings Loan Agreement) that provides for borrowings of up to \$70 million during the Tsugaru construction period, until no later than September 2020. The interest rate on outstanding borrowings under the Tsugaru Holdings Loan Agreement is TIBOR plus 3.0% with principal due July 2022 and a commitment fee of 0.50% on the unused portion of the Tsugaru Holdings Loan Agreement. The Tsugaru Holdings Loan Agreement is subject to certain covenants and is secured by the membership interests and other rights. As of December 31, 2018, outstanding borrowings under the Tsugaru Holdings Loan Agreement totaled \$59 million.

Financing Lease Obligations

In December 2010, Hatchet Ridge entered into a sale-leaseback agreement to finance the project facility for 22 years. The Company evaluated the agreement in accordance with ASC 840 and ASC 360, Property Plant and Equipment, and determined that due to continuing involvement with the project facility, the Company is precluded from treating the agreement as a sale-lease back transaction and accounts for the agreement as a financing lease obligation. Collateral for the agreement includes Hatchet Ridge's tangible assets and contractual rights and cash on deposit with the depository agent. Its loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict Hatchet Ridge's ability to incur debt, grant liens, sell or lease assets, transfer equity interests, dissolve, pay distributions and change its business.

Payments under the financing lease for the years ended December 31, 2018, 2017 and 2016, were \$15 million, \$13 million and \$15 million, respectively.

11. Asset Retirement Obligations

The Company's asset retirement obligations represent the estimated cost of decommissioning the turbines, removing above-ground installations and restoring sites at the end of their estimated economic useful life.

In the third quarter of 2018, the Company committed to a plan to re-power its Gulf Wind project by the end of 2020. In connection with the decision to repower the facility and accelerate decommissioning of the existing facilities, the Company received updated cost information. This initiated a new decommissioning cost study for which the Company revised its estimated future cash flows to reflect the updated costs and timing for its asset retirement obligations. The Company recognized the revision by increasing the carrying amount of the liability for the asset retirement obligation and the carrying amount of the related property, plant and equipment. The change in estimate did not result in any charge to net income (loss) for the year ended December 31, 2018.

The following table presents a reconciliation of the beginning and ending aggregate carrying amounts of asset retirement obligations (in millions):

	Decem	ıb	er 31,
	2018		2017
Beginning asset retirement obligations	\$ 57		\$ 45
Net additions during the year (1)	67		9
Foreign currency translation adjustment	(2)	_
Divested operations	(3)	_
Revision in estimated cash flows	85		_
Accretion expense	5		3
Ending asset retirement obligations	\$ 209		\$ 57

(1) Reflects non-cash additions due to acquisitions and construction during the year ended December 31, 2018. See Note 5, Acquisitions, for discussion of acquisitions.

12. Derivative Instruments

The Company employs a variety of derivative instruments to manage its exposure to fluctuations in electricity prices, interest rates and foreign currency exchange rates. Energy prices are subject to swings as supply and demand are impacted by, among many other unpredictable items, weather, market liquidity, generating facility availability, customer usage, storage, and transmission and transportation constraints. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon movement in interest rates. Additionally, the Company is exposed to foreign currency exchange rate risk primarily from its business operations in Canada and Japan. The Company's objectives for holding these derivative instruments include reducing, eliminating and efficiently managing the economic impact of these exposures as effectively as possible. The Company does not hedge all of its electricity price risk, interest rate risks, and foreign currency exchange rate risks, thereby exposing the unhedged portions to changes in market prices.

As of December 31, 2018, the Company had other energy-related contracts that did not meet the definition of a derivative instrument or qualified for the NPNS exception and were therefore exempt from fair value accounting treatment.

The following tables present the fair values of the Company's derivative instruments on a gross basis as reflected on the Company's consolidated balance sheets (in millions):

December 31 2018

December 31, 20	10
Derivative	Derivative
Assets	Liabilities
Currented Curren	Currenong-Term

Fair Value of Designated Derivatives:

Interest rate swaps \$— \$ 3 \$ 2 \$ 25

Fair Value of Undesignated Derivatives:

Interest rate swaps	—	—		—	4	
Energy derivative	7	_		_	—	
Foreign currency forward contracts	6	6		_	2	
Congestion revenue rights	1	_		_	—	
Total Fair Value	\$14	\$	9	\$ 2	\$	31

December 31, 2017

Derivative Derivative
Assets Liabilities
Currentong-Term Currentong-Term

Fair Value of Designated Derivatives:

Interest rate swaps \$— \$ 2 \$ 4 \$ 18

Fair Value of Undesignated Derivatives:

Interest rate swaps		1	3
Energy derivative	19 8		
Foreign currency forward contracts		3	_
Total Fair Value	\$19 \$ 10	\$8	\$ 21

The following table summarizes the notional amounts of the Company's outstanding derivative instruments (in millions except for MWh):

<u>-</u>		Decembe	er 31,
	Unit of Measure	2018	2017
Designated Derivative Instruments			
Interest rate swaps	USD	\$319	\$ 253
Interest rate swaps	CAD	\$721	\$ 736
Interest rate swaps	JPY	¥55,675	¥ —
Undesignated Derivative Instruments			
Interest rate swaps	USD	\$138	\$ 85
Energy derivative	MWh	193,252	697,471
Foreign currency forward contracts	CAD	\$106	\$ 128
Foreign currency forward contracts	JPY	¥11,589	¥ —
Congestion revenue rights	MWh	505	
Darivetives Designated as Hadging In	etrumente		

Derivatives Designated as Hedging Instruments

Cash Flow Hedges

The Company has interest rate swap agreements to hedge variable rate project-level debt. Under these interest rate swaps, the projects make fixed-rate interest payments and the counterparties to the agreements make variable-rate interest payments. For interest swaps that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the hedge is reported as a component of

accumulated other comprehensive loss and reclassified into earnings in the period or periods during which a cash settlement occurs. The designated interest rate swaps have remaining maturities ranging from approximately 5.0 years to 24.3 years.

The following table presents the pre-tax effect of the hedging instruments designated as cash flow recognized in accumulated other comprehensive loss, amounts reclassified to earnings for the following periods, as well as, amounts recognized in interest expense (in millions):

		Year ended
		December 31,
	Description	2018 2017 2016
Losses recognized in accumulated OCI	Effective portion of change in fair value	\$(6) \$(2) \$(8)
Losses reclassified from accumulated OCI into:		
Interest expense	Derivative settlements	\$(5) \$(10) \$(8)
Loss on derivatives	De-designation of derivatives	\$— \$(2) \$—
The Company estimates that \$1 million in accum	nulated other comprehensive loss will be re	classified into earning

The Company estimates that \$1 million in accumulated other comprehensive loss will be reclassified into earnings over the next twelve months.

Derivatives Not Designated as Hedging Instruments

The following table presents gains and losses on derivatives not designated as hedges (in millions):

		Y ear ended
		December 31,
Derivative Type	Financial Statement Line Item	2018 2017 2016
Interest rate derivatives	Gain (loss) on derivatives	\$— \$(1) \$(2)
Energy derivative	Electricity sales	\$(3) \$5 \$(1)
Foreign currency forward contracts	Gain (loss) on derivatives	\$16 \$(7) \$(1)
Foreign currency option contract	Gain (loss) on derivatives	\$1 \$— \$—

Interest Rate Derivatives

The Company has interest rate swap agreements to hedge variable rate project-level debt. Under these interest rate swaps, the projects make fixed-rate interest payments and the counterparties to the agreements make variable-rate interest payments. For interest rate swaps that are not designated and do not qualify as cash flow hedges, the changes in fair value are recorded in loss on derivatives in the consolidated statements of operations as these hedges are not accounted for under hedge accounting. All of the Company's undesignated interest rate swaps have a remaining maturity of 11.5 years.

Energy Derivative

In 2010, Gulf Wind acquired an energy derivative instrument to manage its exposure to variable electricity prices over the life of the arrangement. The energy price swap fixes the price for a predetermined volume of production (the notional volume) over the life of the swap contract, through April 2019, by locking in a fixed price per MWh. The notional volume agreed to by the parties is approximately 504,220 MWh per year. The energy derivative instrument does not meet the criteria required to adopt hedge accounting. As a result, changes in fair value are recorded in electricity sales in the consolidated statements of operations.

As a result of the counterparty's credit rating downgrade, the Company received collateral related to the energy derivative agreement. The Company does not have the right to pledge, invest, or use the collateral for general corporate purposes. As of December 31, 2018, the Company has recorded a current asset of \$6 million to counterparty collateral and a current liability of \$6 million to counterparty collateral liability representing the collateral received and corresponding obligation to return the collateral, respectively.

Foreign Currency Forward and Option Contracts

The Company has established a currency risk management program. The objective of the program is to mitigate the foreign exchange rate risk arising from transactions or cash flows that have a direct or underlying exposure in non-U.S. dollar denominated currencies in order to reduce volatility in the Company's cash flow, which may have an adverse impact to the Company's short-term liquidity or financial condition. A majority of the Company's power sale agreements and operating expenditures are transacted in U.S. dollars, with a growing

portion transacted in currencies other than the U.S. dollar, primarily the Canadian dollar and Japanese yen. The Company enters into foreign currency forward and option contracts at various times to mitigate the currency exchange rate risk on Canadian dollar and, beginning in 2018, Japanese yen denominated cash flows. These instruments have remaining maturities ranging from three months to 11 years. The foreign currency forward and option contracts are considered non-designated derivative instruments and are not used for trading or speculative purposes. As a result, changes in fair value and settlements are recorded in gain (loss) on derivatives in the consolidated statements of operations.

Congestion Revenue Rights

Congestion revenue rights are financial instruments which were acquired via auction in the ERCOT power market that enable the Company to manage variability in electric energy congestion charges due to transmission grid limitations. The Company's congestion revenue rights are considered non-designated derivative instruments and are not used for trading or speculative purposes. As a result, changes in fair value and settlements are recorded in gain (loss) on derivatives in the consolidated statements of operations.

Tree ations

13. Accumulated Other Comprehensive Loss

The following table summarizes changes in the accumulated other comprehensive loss balance, net of tax, by component (in millions):

	_		Portion of Change i Fair Valu of Derivative	of n ie	Proportionate Share of Equity Investee's OCI		te Total	
Balances at December 31, 2015	\$ (48)	\$ (14)	\$ (12)	\$(74)	
Other comprehensive income (loss) before reclassifications	5		(7)	1		(1)	
Amounts reclassified from accumulated other comprehensive loss	_		8		4		12	
Net current period other comprehensive loss	5		1		5		11	
Balances at December 31, 2016	(43)	(13)	(7)	(63)	
Other comprehensive income (loss) before reclassifications	15		(3)	6		18	
Amounts reclassified from accumulated other comprehensive loss	_		11		8		19	
Net current period other comprehensive loss	15		8		14		37	
Balances at December 31, 2017	(28)	(5)	7		(26)	
Other comprehensive loss before reclassifications	(37)	(4)	(3)	(44)	
Amounts reclassified from accumulated other comprehensive loss			5		5		10	
Net current period other comprehensive income (loss)	(37)	1		2		(34)	
Balances at December 31, 2018	\$ (65)	\$ (4)	\$ 9		\$(60)	

14. Fair Value Measurement

The Company's fair value measurements incorporate various factors, including the credit standing and performance risk of the counterparties, the applicable exit market, and specific risks inherent in the instrument. Nonperformance and credit risk adjustments on

risk management instruments are based on current market inputs when available, such as credit default hedge spreads. When such information is not available, internal models may be used.

Assets and liabilities recorded at fair value in the consolidated financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to valuation of these assets or liabilities are set forth below.

Transfers between levels are recognized at the end of each quarter. The Company did not recognize any transfers between levels during the periods presented.

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date. Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuations technique and the risk inherent in the inputs to the model.

Financial Instruments

The carrying value of financial instruments classified as current assets and current liabilities approximates their fair value, based on the nature and short maturity of these instruments, and they are presented in the Company's financial statements at carrying cost. Certain other assets and liabilities were measured at fair value upon initial recognition and unless conditions give rise to an impairment, are not remeasured.

Financial Instruments Measured at Fair Value on a Recurring Basis

The Company's financial assets and liabilities which require fair value measurement on a recurring basis are classified within the fair value hierarchy as follows (in millions):

	Decemb		
	Level Leyel I	Level 3	Total
Assets			
Interest rate swaps	\$ -\$ 3	\$ —	\$3
Energy derivative		7	7
Foreign currency forward contracts	—12		12
Congestion revenue rights		1	1
	\$ -\$ 15	\$8	\$23
Liabilities			
Interest rate swaps	\$ -\$ 31	\$ —	\$31
Foreign currency forward contracts	 2		2
Contingent consideration		130	130
	\$ -\$ 33	\$130	\$163
	Decemb		
	Level 1	Level 3	Total
Assets			
Interest rate swaps	\$ \$ 2	\$ <i>—</i>	\$ 2
Energy derivative		27	27
Foreign currency forward contracts			
	\$ -\$ 2	\$ 27	\$ 29
Liabilities			
Interest rate swaps	\$ -\$ 26	\$ —	\$ 26
Foreign currency forward contracts	3		3
Contingent consideration		22	
	\$ -\$ 29	\$ 22	\$ 51

Level 2 Inputs

Derivative instruments subject to re-measurement are presented in the financial statements at fair value. The Company's interest rate swaps were valued by discounting the net cash flows using the forward LIBOR curve with the valuations adjusted by the Company's credit default hedge rate. The Company's foreign currency forward contracts were valued using the income approach based on the present value of the forward rates less the contract rates, multiplied by the notional amounts.

Level 3 Inputs

Energy Hedge

The fair value of the energy derivative instrument is determined based on a third-party valuation model. The methodology and inputs are evaluated by management for consistency and reasonableness by comparing inputs used by the third-party valuation provider to another third-party pricing service for identical or similar instruments and also reconciling inputs used in the third-party valuation model to the derivative contract for accuracy. Any significant changes are further evaluated for reasonableness by obtaining additional documentation from the third-party valuation provider.

The energy derivative instrument is valued by discounting the projected net cash flows over the remaining life of the derivative instrument using forward electricity prices with little or no market activity. Significant increases or decreases in this input would result in a significantly lower or higher fair value measurement.

The following table presents a reconciliation of the energy derivative contract measured at fair value on a recurring basis using significant unobservable inputs (in millions):

Energy Derivative 2018 2017
Balance, beginning of year \$27 \$41
Total gain (loss) included in electricity sales (3) 5
Settlements (17) (19)
Balance, end of year \$7 \$27

During the years ended December 31, 2018, 2017 and 2016, the Company recognized losses of \$20 million, \$14 million, and \$23 million relating to the energy derivative asset held at December 31, 2018, 2017 and 2016, respectively, which were recorded to energy sales in the consolidated statements of operations.

Contingent Consideration

As part of the Japan Acquisition, the Company is required to pay an additional earn-out of \$118 million, which may be increased by \$10 million if the final Tsugaru cost is less than or equal to the construction budget or may be decreased by \$10 million if the final Tsugaru cost is greater than the construction budget, upon term conversion of the Tsugaru Construction Loan. The discounted fair value of the contingent consideration at the acquisition date was \$103 million, subject to foreign currency exchange rate changes. In July 2018, the Company made a \$3 million cash distribution payment to Pattern Energy Group LP upon term conversion of the Ohorayama construction loan in June 2018.

The Broadview Project acquisition includes contingent consideration, which requires the Company to make an additional payment upon the commercial operation of the Grady Project, a wind project being separately developed by Pattern Development. The contingent post-closing payment reflects the fair value of the Company's interest in the increase in the projected 25-year transmission wheeling revenue Western Interconnect will receive from the Grady Project, adjusted for the estimated production loss incurred by Broadview due to wake effects and transmission losses induced by the operation of the Grady Project. The fair value of the contingent consideration at the acquisition date was \$21 million.

The estimated fair value of the contingent considerations was calculated by using a discounted cash flow technique which utilized unobservable inputs. This fair value measurement is based on significant inputs not observable in the market and thus represent a Level 3 measurement as defined in ASC 820, Fair Value Measurement. As of December 31, 2018, there were no significant changes in these unobservable inputs that may result in significant changes in fair value.

The following table presents a reconciliation of the contingent consideration liability measured at fair value on a recurring basis using significant unobservable inputs (in millions):

Contingent Consideration Liability 2018 2017 Balance, beginning of year \$22 \$ — **Purchases** 106 21 5 Total loss included in other income (expense), net 1 Settlements) — (3 \$130 \$22 Balance, end of year

During the years ended December 31, 2018, and 2017, the Company recognized loss on contingent liabilities of \$2 million and \$1 million, respectively, which were recorded to other income (expense), net in the consolidated statements of operations.

Congestion Revenue Rights

During the year ended December 31, 2018, the Company purchased \$1 million of congestion revenue rights to hedge the financial risk of ERCOT-imposed congestion charges in the day-ahead market. Limited market data is available in the ERCOT auction and between auction dates; therefore, the Company utilizes historical prices to forecast forward prices. During the year ended December 31, 2018, the Company recognized loss on congestion revenue rights of less than \$1 million, which was recorded to gain (loss) on derivatives in the consolidated statements of operations. The valuation techniques and significant unobservable inputs used in recurring Level 3 fair value measurements were as follows (in millions, for fair value):

December 31, 2018	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Energy derivative	\$7	Discounted cash flow	Forward electricity prices	\$20.02 - \$32.58(1)
		110 W	Discount rate	2.80% - 2.81%
Broadview contingent consideration	\$25	Discounted cash flow	Discount rate Annual energy production	4.0% - 8.0% 0.70%
			loss	
Tsugaru contingent consideration	\$105	Discounted cash flow	Deferred purchase price	\$109 - \$128 million
		now	Discount rate	6.90%
Congestion revenue rights	\$1	Market approach	Auction prices	\$2.48 - \$8.23(1)
December 31, 2017	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Energy derivative	\$27	Discounted cash flow	Forward electricity prices	\$14.44 - \$71.45 ⁽¹⁾
		110 11	Discount rate	1.69% - 1.96%
Broadview contingent consideration	\$22	Discounted cash flow	Discount rate	4.0% - 8.0%
			Annual energy production loss	1.0%

(1) Represents price per MWh

Financial Instruments not Measured at Fair Value

The following table presents the carrying amount and fair value and the fair value hierarchy of the Company's financial liabilities that are not measured at fair value in the consolidated balance sheets, but for which fair value is disclosed (in millions):

			Fair Value	2	
	As	reflected on balance sheet	Level	Lovel	2 Total
	the	balance sheet	2	Level	3 Total
December 31, 2018					
Total debt, net	\$	2,283	\$-\$2,240	\$	-\$2,240
December 31, 2017					
Total debt, net	\$	1,931	\$-\$1,938	\$	-\$1,938

Long-term debt is presented on the consolidated balance sheets, net of financing costs, discounts and premiums. The fair value of variable interest rate long-term debt is approximated by its carrying cost. The fair value of fixed interest rate long-term debt is estimated based on observable market prices or parameters or derived from such prices or

parameters. Where observable prices or inputs are not available, valuation models are applied, using the net present value of cash flow streams over the term using estimated market rates for similar instruments and remaining terms.

15. Income Taxes

The following table presents significant components of the provision for income taxes (in millions):

Year ended December 31, 2018 2017 2016

Current:

 Federal
 \$— \$— \$—

 State
 — — —

 Foreign
 16 — —

 Total current expense
 16 — —

 Deferred:
 — —

 Deferred:
 — (3) —

 Federal
 — (3) —

 State
 — — —

 Foreign
 16 15 9

 Total deferred expense
 16 12 9

 Total provision for income taxes
 \$32 \$12 \$9

The following table presents the domestic and foreign components of net loss before income tax provision (in millions):

Year ended
December 31,
2018 2017 2016
U.S. \$(158) \$(119) \$(71)
Foreign 121 49 28
Total \$(37) \$(70) \$(43)

The following table presents a reconciliation of the statutory U.S. federal income tax rate to the Company's effective tax rate, as a percentage of income before taxes for the following periods:

	Year ended December 31,
	2018 2017 2016
Computed tax at statutory rate	21.0 % 35.0 % 35.0 %
Adjustment for income in non-taxable entities allocable to noncontrolling interests	(125.2)% (32.6)% (25.6)%
Foreign rate differential	
Tax rate differential on pre-tax book income	(16.1)% 6.4 % 0.7 %
Dual taxpaying entities outside basis difference	(78.5)% (23.0)% (17.6)%
Local tax on branch profits/(losses)—Puerto Rico	(0.1)% 0.1 % — %
Permanent book/tax differences (domestic only)	0.5 % (0.1)% (0.2)%
Valuation allowance change	38.9 % 47.7 % (18.8)%
Subpart F income	(7.9)% (3.5)% - %
Capital gain exclusion - sale of partnership interest	24.7 % — % — %
Contingent consideration accretion	(4.9)% — % — %
Impairment	1.4 % — % — %
Tax credits	61.7 % 31.6 % 7.6 %
Effect of U.S. tax rate change under Tax Cuts and Jobs Act	— % (78.1)% — %
Other	(2.5)% (0.1)% (0.9)%
Effective income tax rate	(87.0)% (16.6)% (19.8)%

Significant components of the Company's deferred tax assets and liabilities are as follows (in millions):

	Year ended	
	December 31,	
	2018	2017
Deferred tax assets:		
Accruals and prepaids	\$3	\$3
Basis difference in derivatives	3	
Hatchet Ridge financing	17	17
Asset retirement obligation	32	6
Unrealized loss on derivatives	_	2
Net operating loss carryforwards	230	274
Foreign currency translation adjustments	2	3
Other deferred tax assets	12	2
Tax credits	118	42
Total gross deferred tax assets	417	349
Less: Valuation allowance	(175)	(141)
Total gross deferred tax assets net of valuation allowance	\$242	\$208
Deferred tax liabilities:		
Property, plant and equipment	\$(215)	\$(189)
Intangibles	(24)	
Partnership interest	(108)	(65)
Deferred interest, commitment fees and financing costs	(2)	(2)
Unrealized gain on derivatives	(2)	
Basis difference in subsidiaries	(2)	(1)
Other deferred tax liabilities	(1)	(1)
Total gross deferred tax liabilities	(354)	(258)

Total net deferred tax assets/(liabilities)

\$(112) \$(50)

On December 22, 2017, the Tax Act was enacted into law. The Tax Act contained several key provisions that affected corporations, including a reduction in the U.S. federal corporate income tax rate from 35% to 21%, effective January 1, 2018. Included in the key provisions are a transition from a worldwide system of taxation to a primarily territorial tax system accompanied by a tax on deemed repatriation of undistributed and previously untaxed non-U.S. earnings, a tax on global intangible low-taxed income ("GILTI"), a tax determined by base erosion and anti-abuse benefits (BEAT) from certain payments between a U.S. corporation and foreign subsidiaries, a limitation on deductible executive compensation, and a net business interest expense limitation. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period, not to exceed one year from the date of enactment, for companies to complete the accounting related to the Tax Act under ASC 740. As of December 2018, the Company had completed its accounting for the tax effects of the Tax Act. As part of the completion of such accounting, the Company elected to account for GILTI as a period cost.

The U.S. operations are in a net deferred tax asset position offset by a full valuation allowance. The change in net deferred tax assets before valuation allowance during the period ended December 31, 2018 includes deferred tax assets established for potential U.S. foreign tax credits of \$52 million that may be generated by the reversal of the deferred tax liability related to temporary differences from Japan operations that were acquired in 2018 and are conducted through a branch for U.S. tax purposes. While the companies are disregarded entities for U.S. tax purposes, they are corporations for local tax purposes and are therefore subject to local and U.S. taxation.

In 2018, the Company operated entities in Canada, Japan, and Chile that are taxed in both local jurisdictions and the

U.S. The Company's tax rate reflects the impact of double taxation from these entities.

On December 31, 2018, Pattern Canada Financing Company ("PCFC") sold its entire minority interest in the K2 project for a net tax gain for Canada tax purposes of \$12 million after utilization of a net operating loss carryforward and other tax attributes.

The Company recorded a valuation allowance against the majority of its deferred tax assets as of December 31, 2017 and December 31, 2018. The Company intends to continue maintaining a valuation allowance on certain deferred tax assets until there is sufficient evidence to support the reversal of all or some portion of these allowances. However, given its current earnings and anticipated future earnings, it believes there is a reasonable possibility that within the next 12 months, sufficient positive evidence may become available to allow it to reach a conclusion that a portion of the valuation allowance will no longer be needed. Release of a portion or all of the valuation allowance would result in the recognition of certain deferred tax assets and a decrease to income tax expense for the period the release is recorded. However, the exact timing and amount of the valuation release are subject to change on the basis of the level of profitability that the Company is able to achieve.

The net change in valuation allowance was an increase of \$34 million for the tax year ended December 31, 2018. The increase was primarily driven by potential U.S. foreign tax credits related to Japan branch operations partially offset by a decrease of operating losses in the U.S. federal and state jurisdictions.

As of December 31, 2018, the Company has U.S federal and state net operating loss (NOL) carryforwards in the amount of \$959 million and \$190 million, respectively, which begin to expire in the year ending December 31, 2034 for federal and state purposes. The Company also has foreign net operating loss carryforwards in Canada in the amount of \$31 million which begin to expire in the year ending December 31, 2029, foreign net operating loss carryforwards in Puerto Rico of \$4 million that begins to expire in the year ending December 31, 2022, and foreign net operating loss carryforwards in Japan of \$13 million that can be carried forward indefinitely.

The Company's production tax credits of \$17 million begin to expire in the year ending December 31, 2033. Internal Revenue Code Section 382 places a limitation (the Section 382 limitation) on the amount of taxable income that can be offset by NOL and credit carryforwards, as well as built-in losses, after a change in control (generally greater than 50% change in ownership) of a loss corporation. California has similar rules. The Company did not have any historic U.S. NOLs prior to October 2, 2013 except for NOLs from its Puerto Rico entity which may be subject to Section 382 limitation.

The Company experienced a change in ownership on May 14, 2014. As a result, the Company's NOL carryforwards and credits generated through the date of change are subject to an annual limitation under Section 382. If the Company generates sufficient taxable income, its pre-change NOLs and credits are not expected to expire unutilized due to a Section 382 limitation.

The Company is required to recognize in the financial statements the impact of a tax position, if that position is not more likely than not of being sustained on audit, based on the technical merits of the position. As of December 31, 2018, the Company does not have any unrecognized tax benefits and does not have any tax positions for which it is reasonably possible that the amount of gross unrecognized tax benefits will increase or decrease within 12 months after the year ended December 31, 2018.

The Company files income tax returns in the U.S. federal jurisdiction, various state jurisdictions and foreign jurisdictions in Canada, Japan and Puerto Rico. The Company's U.S., Canada and Puerto Rico income tax returns for 2015 and forward are subject to examination by taxing authorities. The statute of limitations in Japan is generally five years from the date of filing, plus extension. The Japan statute of limitations for transfer pricing is six years from the date of filing, and net operating losses generally extend the statute to ten years, depending on the year in which the loss originated.

The Company has a policy to classify accrued interest and penalties associated with uncertain tax positions together with the related liability, and the expenses incurred related to such accruals are included in the provision for income taxes. The Company did not incur any interest expenses or penalties or have outstanding liabilities on the balance sheet associated with unrecognized tax benefits for the year ended December 31, 2018.

The Company operates under a tax holiday in Puerto Rico which enacted a special tax rate of 4% for businesses dedicated to the production of energy for the consumption through the use of renewal sources. Act 73 of May 28, 2008 as amended, known as the "Economic Incentives for the Development of Puerto Rico Act" (the "Act"), promotes the development of green energy projects through economic incentives so as to reduce the island's dependency on oil. On September 15, 2016, the Company commenced operations under the Act 83 Grant while simultaneously surrendering operations under Act 73 Grant. The Act 83 Grant affords the Company identical tax benefits to the Act 73 Grant but has a duration of 25 years, thereby extending the Grant benefit for 25 years at the date of conversion. The

Act 83 Grant continues to provide for a 4% reduced income tax rate in Puerto Rico, and is scheduled to terminate on December 31, 2041. The impact of the tax holiday decreased foreign deferred tax expense by \$0.4 million for the year ended December 31, 2018. The impact of the tax holiday on basic and diluted net income per share of Class A common stock for the year ended December 31, 2018 was \$0.004.

16. Stockholders' Equity

Preferred Stock

The Company has 100,000,000 shares of authorized preferred stock issuable in one or more series. The Company's Board of Directors is authorized to determine the designation, powers, preferences and relative, participating, optional or other special rights of any such series. As of December 31, 2018 and 2017, there was no preferred stock issued and outstanding.

Common Stock

On October 23, 2017, the Company completed an underwritten public offering of its Class A common stock. In total, 9,200,000 shares of the Company's Class A common stock were sold at a public offering price of \$23.40 per share. This includes 1,200,000 shares purchased by the underwriters to cover over-allotments. Aggregate net proceeds of the equity offering, including the proceeds of the over-allotment option, were approximately \$212 million after deduction of underwriting discounts, commissions, and transaction expenses.

On August 12, 2016, the Company completed an underwritten public offering of its Class A common stock. In total, 10,000,000 shares of the Company's Class A common stock were sold. In connection with the equity offering, the underwriters had a 30-day option to purchase up to an additional 1,500,000 shares of Class A common stock to cover over-allotments. On August 22, 2016, the underwriters partially exercised their over-allotment option and purchased an additional 1,300,000 shares of Class A common stock. Aggregate net proceeds of the equity offering, including the proceeds of the over-allotment option, were approximately \$259 million after deduction of underwriting discounts, commissions, and transaction expenses.

On May 9, 2016, the Company entered into an Equity Distribution Agreement with RBC Capital Markets, LLC, KeyBanc Capital Markets Inc. and Morgan Stanley & Co. LLC (collectively, the Agents). Pursuant to the terms of the Equity Distribution Agreement, the Company may offer and sell shares of the Company's Class A common stock, par value \$0.01 per share, from time to time through the Agents, as the Company's sales agents for the offer and sale of the shares, up to an aggregate sales price of \$200 million. For the year ended December 31, 2018, the Company did not sell any shares under the Equity Distribution Agreement. For the years ended December 31, 2017 and 2016, the Company sold 1,068,261 and 1,240,504 shares, respectively, under the Equity Distribution Agreement; net proceeds under the issuances were \$25 million and \$28 million and the aggregate compensation paid by the Company to the Agents with respect to such sales was less than \$1 million for December 31, 2017 and 2016, respectively. As of December 31, 2018, approximately \$144 million in aggregate offering price remained available to be sold under the agreement.

Voting Rights

Holders of the Company's Class A common stock as of December 31, 2018 are entitled to one vote per share on all matters submitted to a vote of stockholders and will vote as a single class under all circumstances.

Noncontrolling Interests

The following table presents the balances for noncontrolling interests by project (in millions).

	December 31,		
	2018	2017	
El Arrayán (1)	\$ —	\$32	
Logan's Gap	132	171	
Panhandle 1	131	175	
Panhandle 2	176	208	
Post Rock	116	160	
Amazon Wind	101	134	
Broadview Project	257	308	
Futtsu	10		
Meikle	57	66	
MSM	37		
Stillwater	95		
Noncontrolling interests	\$1 112	\$1.25/	

Noncontrolling interests \$1,112 \$1,254

⁽¹⁾ Noncontrolling interest of El Arrayán was derecognized as a result of the sale of the Company's operation in Chile.

The following table presents the components of total noncontrolling interests as reported in stockholders' equity in the consolidated balance sheets (in millions).

Accumulated

	Capital	Accumulat Income (Loss)	ted	Oth Con	umurate er nprehens ome (Los	sive	Noncontroll Interests	ling
Balances at December 31, 2015	\$972	\$ (27)	\$	(1)	\$ 944	
Distributions to noncontrolling interests	(18)	_					(18)
Net loss	_	(35)	_			(35)
Other comprehensive income, net of tax	_	_		_				
Balances at December 31, 2016	954	(62)	(1)	891	
Acquisitions	390			—			390	
Distributions to noncontrolling interests	(20)	_		_			(20)
Partial sale of subsidiary	56			—			56	
Net loss		(64)	—			(64)
Other comprehensive income, net of tax				1			1	
Balances at December 31, 2017	\$1,380	\$ (126)	\$			\$ 1,254	
Acquisitions	49	_		_			49	
Contribution from noncontrolling interests	98	_		_			98	
Distributions to noncontrolling interests	(38)			—			(38)
Sale of subsidiaries	(37)	5		—			(32)
Net loss (1)		(211)	—			(211)
Other comprehensive loss, net of tax		_		(8)	(8)
Balances at December 31, 2018	\$1,452	\$ (332)	\$	(8)	\$ 1,112	

On December 22, 2017, the Tax Act was signed into law, which enacted major changes to the U.S. federal income tax laws, including a permanent reduction in the U.S. federal corporate income tax rate from 35% to 21%, effective January 1, 2018. Reduction in the corporate income tax rate resulted in a one-time reduction in the noncontrolling interests attributable to partners in its tax equity partnerships. As part of the liquidation waterfall, the Company

(1) allocated significantly lower portions of the hypothetical liquidation proceeds to compensate certain noncontrolling interest investors for tax gains on the hypothetical sale calculated at the lowered rate of 21% as compared to the rate of 35% that was previously utilized. For the year ended December 31, 2018, included in net loss attributable to noncontrolling interests is a one-time adjustment of \$150 million as a result of the decrease in the federal corporate income tax rate.

Pay-go Contribution

The Broadview Acquisition includes a partial pay as you go (Pay-go) funding arrangement under which, when the actual annual MWh production of Broadview exceeds a certain production threshold, the tax equity investors are obligated to make a cash contribution ("Pay-go contribution") to the Company. The Pay-go arrangement resulted in a lower initial investment by the tax equity partners and provided them with some protection from potential underperformance of Broadview. For the year ended December 31, 2018, the actual MWh production of Broadview exceeded the production threshold which resulted in a Pay-go contribution receivable from the tax equity partners in the amount of approximately \$4 million. The Company classified the receivable as a component of noncontrolling interests in the accompanying consolidated balance sheets. The Company expects to receive the Pay-go contribution by the end of the first quarter of 2019.

Allocations of Distributions and Tax Allocations for Tax Equity Partnerships

Generally, tax equity partnerships have specific commercial terms that dictate distributions of cash and allocation of tax items among the partners, who are divided into one of two categories: tax equity and cash investor. A disproportionate share of income and cash is given to tax equity in order for them to achieve a target after-tax yield or "flip" near year 10 of project operations. The target yield and flip term vary by agreement and are dependent on project performance. Prior to the flip, tax items (income, US Federal production tax credits) are commonly allocated 99% to the tax equity. On the other hand, distributable cash is divided among the partners in percentages that do not match the

tax items. Cash distribution percentages can be temporarily increased for tax equity in the event that certain cumulative distribution thresholds are not achieved. Once tax equity reaches their target yield, the allocations and distributions "flip" to different amounts. After the flip, income and cash are typically allocated 5% to the tax equity and 95% to the cash investor. REC sales are often specially addressed in each agreement with most of the cash and income directed to the cash investor both pre and post-flip.

Tax equity partnerships imposes a range of affirmative and negative covenants that are similar to what a term lender would require, such as, financial reporting, insurance maintenance and prudent operator standards. Most of these restrictions end once the flip point occurs and any deficit restoration obligation of the tax equity has been eliminated. There are also covenants that specifically seek to preserve the tax attributes of the project that are not customary for project term lenders.

If tax equity suffers any losses or damages as the result of a breach of representation, covenant, or other obligation by the cash investor in its capacity as managing member, tax equity may provide notice to the cash investor and require that any distributions otherwise required to be paid to the cash investor shall, instead, be paid to tax equity to cover any damages.

17. Equity Incentive Award Plan

Under the Amended and Restated 2013 Equity Incentive Award Plan (2013 Plan), the Company may issue 3,000,000 aggregate number of shares of Class A common stock for equity awards including incentive and nonqualified stock options, restricted stock awards (RSAs) and restricted stock units (RSUs) to employees, directors and consultants. RSAs provide the holder with immediate voting rights, but are restricted in all other respects until released. RSUs generally entitle the holders the right to receive the underlying shares of the Company's Class A common stock upon vesting. Upon cessation of services to the Company, any nonvested RSAs and RSUs will be forfeited. All nonvested RSAs and RSUs accrue dividends and distributions, which are subject to vesting and paid in cash upon release. Accrued dividends and distributions are forfeitable to the extent that the underlying awards do not vest. As of December 31, 2018, there were 1,780,006 aggregate number of Class A shares available for issuance under the 2013 Plan

Stock-Based Compensation

Stock-based compensation expenses related to, RSAs, RSUs and stock options are recorded as a component of general and administrative expenses in the Company's consolidated statements of operations and totaled \$5 million, \$5 million and \$5 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Restricted Stock Awards

The Company granted time-based RSAs to certain employees and independent directors. The Company measures the fair value of the RSAs at the grant date and accounts for stock-based compensation by amortizing the fair value on a straight line basis over the related vesting period.

The following table summarizes RSA activity under the 2013 Plan for the year ended December 31, 2018:

		Weighted-Average
	Shares	Grant-Date
		Fair Value
Nonvested at December 31, 2017	110,579	\$ 19.26
Granted	138,817	\$ 18.67
Vested	(127,268)	\$ 19.03
Nonvested at December 31, 2018	122,128	\$ 18.84

For the years ended December 31, 2018, 2017 and 2016, the total fair value of RSAs vested was \$3 million, \$3 million and \$2 million, respectively. The weighted-average grant date fair values per RSA granted during the same periods were \$18.67, \$20.35 and \$18.76, respectively.

As of December 31, 2018, the total unrecorded stock-based compensation expense for nonvested RSAs was \$2 million, which is expected to be amortized over a weighted-average period of 1.7 years.

RSAs that contain Market Conditions

The Company granted TSR-RSAs to certain senior management personnel. The number of awards granted represented the target number of shares of Class A common stock that may be earned; however, the number of vested TSR-RSAs is assessed at the end of a three-year performance period in accordance with the level of total shareholder return of the Company's stock price achieved relative to a peer group during the specified period. Following the date of grant, rights to dividends will accrue on the maximum number of shares and may be forfeited if the market or service conditions are not achieved.

The Company measures the fair value of these restricted stock awards at the grant date using a Monte Carlo simulation model and amortizes the fair value over the longer of the requisite period or performance period. The Company estimates expected volatility based on the actual volatility of the Company's daily closing share price since listing on September 27, 2013 and the historical volatility of comparable publicly traded companies for a period that is equal to the performance period. The risk-free interest rate is based on the yield on U.S. government bonds for a period commensurate with the performance period. The assumptions used to estimate the fair value of TSR-RSAs are as follows:

Years ended December 31, 2018 2017 2016 Expected stock price volatility⁽¹⁾ 32% 35% 34% Expected dividend yield N/A N/A N/A Risk-free interest rate 2.38% 1.60% 1.11% Expected performance period in years⁽²⁾ 2.8 2.8 2.8

- (1) The expected volatility was estimated using the historical volatility derived from the Company's Class A common stock.
- (2) The expected performance period was estimated based on the length of the remaining performance period from the grant date.

The following table summarizes TSR-RSAs activity under the 2013 Plan for the year ended December 31, 2018:

For the years ended December 31, 2018, 2017, and 2016, the weighted-average grant-date fair value per TSR-RSAs granted was \$18.20, \$19.48 and \$20.63, respectively.

As of December 31, 2018, the total unrecorded stock-based compensation expense related to nonvested TSR-RSAs was \$2 million, which is expected to be amortized over a weighted-average period of 1.8 years.

Restricted Stock Units

In 2018, 2017 and 2016, the Company granted time-based deferred RSUs to certain independent directors. Deferred RSUs are equity awards that entitle the holder the right to receive shares of the Company's Class A common stock upon vesting and are settled on, or as soon as administratively possible after the settlement date which is January 1 following the date of the director's termination of service. The Company measures the fair value of deferred RSUs at the grant date and accounts for stock-based compensation by amortizing the fair value on a straight line basis over the related vesting period.

During the year ended December 31, 2018, there were RSU grants of 25,885 shares, all of which vested. The total fair value of deferred RSUs vested for the years ended December 31, 2018, 2017 and 2016, was less than a million dollars, \$1 million and \$1 million, respectively. The weighted-average grant date fair value of stock awards granted during the same periods was \$21.49, \$18.99 and \$20.29, respectively. As of December 31, 2018, there were no nonvested deferred RSUs.

Stock Options

During the years ended December 31, 2018, 2017 and 2016, no options were granted or exercised.

A summary of option activity under the employee share option plan as of December 31, 2018, and changes during the vear then ended is presented below.

	Shares	Weighted-Averag Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in millions)
Outstanding at December 31, 2017	411,323	\$ 22.00		
Forfeited or expired	(29,169)	\$ 22.00		
Outstanding at December 31, 2018	382,154		4.7	
Exercisable at December 31, 2018	382,154		4.7	_

18. Earnings (Loss) Per Share

Basic earnings (loss) per share is computed by dividing net earnings (loss) attributable to common stockholders by the weighted average number of common shares outstanding during the reportable period. Diluted earnings (loss) per share is computed by adjusting basic earnings (loss) per share for the effect of all potential common shares unless they are anti-dilutive. For purposes of this calculation, potentially dilutive securities are determined by applying the treasury stock method to the assumed exercise of in-the-money stock options and the assumed vesting of outstanding RSAs and release of deferred RSUs. Potentially dilutive securities related to convertible senior notes are determined using the if-converted method.

The Company's vested deferred RSUs have non-forfeitable rights to dividends prior to release and are considered participating securities. Accordingly, they are included in the computation of basic and diluted earnings per share, pursuant to the two-class method; however, due to amounts being well below \$1 million dollars, they are not shown in the table below. Under the two-class method, distributed and undistributed earnings allocated to participating securities are excluded from net earnings (loss) attributable to common stockholders for purposes of calculating basic and diluted earnings (loss) per share. However, net losses are not allocated to participating securities since they are not contractually obligated to share in the losses of the Company.

Potentially dilutive securities excluded from the calculation of diluted earnings (loss) per share because their effect would have been anti-dilutive were 9 million, 9 million and 8 million, respectively, for the years ended December 31, 2018, 2017 and 2016.

The computations for Class A basic and diluted earnings (loss) per share are as follows (in millions except share data):

	r ear ended De	cember 31,	
	2018 2017	2016	
Numerator for basic and diluted earnings (loss) per share:			
Net income (loss) attributable to Pattern Energy	\$142 \$ (18) \$ (17)
Less: earnings allocated to participating securities			
Net income (loss) attributable to common stockholders	\$142 \$ (18) \$ (17)

Denominator for earnings (loss) per share:

Weighted average number of shares:

Class A common stock - basic 97,456890779,343 79,382,388

Add dilutive effect of:

Restricted stock awards 193,910— — Restricted stock units 1,184 — —

Class A common stock - diluted 97,651850179,343 79,382,388

Earnings (loss) per share:

Class A common stock:

Basic \$1.45 \$ (0.20) \$ (0.22) Diluted \$1.45 \$ (0.20) \$ (0.22)

Dividends declared per Class A common share \$1.69 \$ 1.67 \$ 1.58

19. Commitments and Contingencies

Commitments

The following table summarizes estimates of future commitments related to the various agreements that the Company has entered into as of December 31, 2018 (in millions):

	2019	2020	2021	2022	2023	Thereafter	Total
Transmission service agreements (1)	\$24	\$24	\$ 24	\$ 24	\$ 24	\$ 495	\$615
Operating leases (2)	22	21	22	21	22	352	460
Service and maintenance agreements	32	30	30	27	26	68	213
Construction and other commitments	192	155	4	3	3	34	391
Total commitments	\$270	\$230	\$ 80	\$ 75	\$ 75	\$ 949	\$1,679

⁽¹⁾Future commitments under the transmission service agreements are based on current rates, which are subject to future changes.

⁽²⁾Certain operating leases have adjustments for market provisions. Amounts in the above table represent the best estimates of future payments to be made under these leases.

Transmission Service Agreements

In connection with the Broadview Project acquisition, the Company became a party to various long-term transmission service agreements expiring between 3-29 years. The Company recorded transmission service costs related to such agreements of \$25 million for the year ended December 31, 2018.

Operating Leases

The Company has entered into various non-cancellable long-term operating lease agreements related to offices and lands for its wind farms expiring between 1-40 years. Certain of these arrangements contain contingent rental payment provisions based upon the volume of electricity generated at a particular windfarm. The Company recognizes rent expense under such arrangements on a straight-line basis. For the years ended December 31, 2018, 2017 and 2016, the Company recorded rent expenses of \$18 million, \$15 million and \$13 million, respectively, in project expense in its consolidated statements of operations.

In March 2018, the Company entered into an operating lease for its new corporate headquarters in San Francisco, California. Total operating lease payments are approximately \$35 million over the term of the lease which expires in December 2028.

Service and Maintenance Agreements

The Company has entered into service and maintenance agreements with third party contractors to provide turbine operations and maintenance services and modifications and upgrades for varying periods over the next 22 years. The computation of outstanding commitments includes an estimated annual price adjustment for inflation of 2%, where applicable. For the years ended December 31, 2018, 2017 and 2016, the Company recorded service and maintenance expense under these agreements of \$38 million, \$47 million and \$53 million, respectively, in project expense in its consolidated statements of operations.

Construction and Other Commitments

Included in construction and other commitments are payments in lieu of taxes, Tsugaru construction, Gulf Wind re-powering, and various other commitments related to the Company's projects and operations of its business. Payments in lieu of taxes include payments the Company is required to make in lieu of taxes as a result of tax savings realized as part of the issuance of the industrial revenue bonds. See Note 7, Intangible Assets and Liabilities and Goodwill, for further discussion. Tsugaru is currently in construction and expected to commence commercial operations in early to mid-2020.

Gulf Wind Re-Powering Commitment

In September 2018, the Company committed to a plan to re-power the Gulf Wind project. In connection with the re-powering plan, the Company entered into a turbine purchase agreement for a maximum purchase price of \$151 million plus certain storage costs, depending upon the number of turbines purchased. The Company has the option, exercisable by September 2, 2019, to reduce the number of turbines.

Separately, in September 2018, the Company exercised its option to purchase turbines from an affiliate of Pattern Development. Such affiliate of Pattern Development has until August 30, 2019 to determine the number of turbines to sell to the Company.

Letters of Credit

Power Sale Agreements

The Company owns and operates wind and solar power projects, and has entered into various long-term PSAs that terminate from 2019 to 2043. The terms of these agreements generally provide for the annual delivery of a minimum amount of electricity at fixed prices and in some cases include price escalation over the term of the agreement. Under the terms of these agreements, as of December 31, 2018, irrevocable letters of credit totaling \$156 million were available to be issued to guarantee the Company's performance for the duration of the agreements.

Project Finance and Lease Agreements

The Company has various project finance and lease agreements which obligate the Company to provide certain reserves to enhance its credit worthiness and facilitate the availability of credit. As of December 31, 2018, irrevocable letters of credit totaling \$170 million which includes letters of credit available under the Revolving Credit Facility were available to be issued to ensure performance under these various project finance and lease agreements.

Contingencies

Turbine Operating Warranties and Service Guarantees

The Company has various turbine availability warranties from its turbine manufacturers and service guarantees from its service and maintenance providers. Pursuant to these guarantees, if a turbine operates at less than minimum availability during the guarantee measurement period, the service provider is obligated to pay, as liquidated damages at the end of the warranty measurement period, an amount for each percent that the turbine operates below the minimum availability threshold. In addition, pursuant to certain of these guarantees, if a turbine operates at more than a specified availability during the guarantee measurement period, the Company has an obligation to pay a bonus to the service provider at the end of the warranty measurement period. As of December 31, 2018, the Company recorded liabilities of less than \$1 million associated with bonuses payable to turbine manufacturers and service providers. Contingencies in connection with the Broadview Project Acquisition

The Company recorded a \$7 million contingent obligation, payable to a third party who holds a 1% interest in Western Interconnect, at fair value upon the acquisition of the Broadview Project. These contingent payments are subject to certain conditions, including the actual energy production of Broadview in a production year and the continued operation of Broadview. Additionally, the Company initially recorded a \$29 million contingent obligation, payable to the same counterparty, at fair value using a discount rate of approximately 5% upon the acquisition of the Broadview Project. The undiscounted contingent obligation is estimated to be approximately \$50 million and is expected to be paid over the life of the PSA term. These contingent payments are subject to certain conditions, including the commercial operation of the Grady Project. The contingent payment is calculated as a percentage of additional transmission revenue earned by Western Interconnect upon the Grady Project's commercial operation. Contingencies in connection with the Sale of Panhandle 2 interests

In connection with the sale of Panhandle 2, the Company agreed to indemnify PSP Investments up to \$5 million to cover PSP Investments' pro rata share of the economic impacts resulting from planned transmission outages in the Texas market until December 31, 2019. As of December 31, 2018, the Company recorded a contingent liability of \$4 million associated with the indemnity.

Legal Matters

From time to time, the Company has become involved in claims and legal matters arising in the ordinary course of business. Management is not currently aware of any matters that will have a material adverse effect on the financial position, results of operations, or cash flows of the Company.

Indemnity

The Company provides a variety of indemnities in the ordinary course of business to contractual counterparties and to its lenders and other financial partners. The Company is party to certain indemnities for the benefit of project finance lenders and tax equity partners of certain projects.

The Company also enters into indemnity agreements in the ordinary course of business with surety bond providers that issue surety bonds to contractual counterparties in connection with the decommissioning projects and other performance obligations. Pursuant to the indemnity agreements, the Company is obligated, on a joint and several basis with the project company, to indemnify the surety in the event of a draw by the beneficiary. The indemnity obligation is limited to the amount of the bonds and certain related costs and expenses.

20. Related Party Transactions

Management fees

The Company provides management services and receives a fee for such services under agreements with its joint venture investees, South Kent, Grand, and Armow, in addition to various Pattern Energy Group LP subsidiaries and equity method investments. In connection with the Japan Acquisition, the Company receives management services related to the acquired projects and incurred a fee for such services under agreements with a subsidiary of Pattern Development in 2018.

Management Services Agreement and Shared Management

The Company has entered into a MSA with the Pattern Development Companies, which provides for the Company and the Pattern Development Companies to benefit, primarily on a cost-reimbursement basis, from the parties'

respective management and other professional, technical and administrative personnel, all of whom report to the Company's executive officers. Costs and expenses incurred at the Pattern Development Companies or their respective subsidiaries on the Company's behalf will be allocated to the Company. Conversely, costs and expenses incurred at the Company or its respective subsidiaries on the behalf of a Pattern Development Company will be allocated to the respective Pattern Development Company.

Pursuant to the MSA, certain of the Company's executive officers, including its Chief Executive Officer (shared PEG executives), also serve as executive officers of the Pattern Development Companies and devote their time to both the Company and the Pattern Development Companies as is prudent in carrying out their executive responsibilities and fiduciary duties. The shared PEG executives have responsibilities for both the Company and the respective Pattern Development Companies and, as a result, these individuals do not devote all of their time to the Company's business. Under the terms of the MSA, each of the respective Pattern Development Companies is required to reimburse the Company for an allocation of the compensation paid to such shared PEG executives reflecting the percentage of time spent providing services to such Pattern Development Company.

Employee Savings Plan

The Company participates in a 401(k) plan sponsored and maintained by Pattern Energy Group LP. For the years ended December 31, 2018, 2017 and 2016, the Company contributed \$1 million, \$1 million and \$1 million, respectively, which was recorded as general and administrative expense on the consolidated statements of operations.

Related Party Transactions

The table below presents amounts due from and to related parties as included in the consolidated balance sheets for the following periods (in millions):

	Decei	nber
	31, 20)18
	2018	2017
Other current assets	\$7	\$ 13
Total due from related parties	\$7	\$ 13
Other current liabilities	\$9	\$ 11
Contingent liabilities, current	25	_
Contingent liabilities	105	21
Total due to related parties	\$139	\$ 32

The table below presents the revenue, reimbursement and (expenses) recognized for management services and under the MSA, as included in the statements of operations for the following periods (in millions):

		Years	Ended	
		Decen	nber 31	,
Related Party Agreemen	t Financial Statement Line Item	2018	2017	2016
Management fees	Other revenue	\$9	\$8	\$6
Management fees	Project expense	\$1	\$	\$—
MSA reimbursement	General and administrative	\$12	\$12	\$5
MSA costs	Related party general and administrative expense	\$(15)	\$(14)	\$(10)

Purchase and Sales Agreements

During the years ended December 31, 2018, and 2017, the Company consummated the following investment and acquisitions with Pattern Energy Group LP and Pattern Development which are further detailed in Note 5, Acquisitions (in millions):

		Cash		
Acquisitions from Pattern Development Companies	Data of Acquisition	consideration	Debt	Contingent
Acquisitions from rattern Development Companies	Date of Acquisition	net of	Assumed	Consideration
		acquired cash		
Japan projects	March 7, 2018	\$ 158	\$ 181	\$ 106
MSM	August 10, 2018	\$ 31	\$ 196	\$ —
Stillwater Wind LLC	November 20, 2018	\$ 17	\$ —	\$ —
Broadview Project	April 21, 2017	\$ 169	\$ 51	\$ 21
Meikle	August 10, 2017	\$ 58	\$ 266	\$ —

Investment in Pattern Development

During 2018, the Company funded \$115 million into Pattern Development of which approximately \$23 million was used by Pattern Development to fund the redemption of Pattern Energy Group LP's interest. As of December 31, 2018, the Company has funded \$183 million in aggregate and holds an approximate 29% ownership interest in Pattern Development 2.0.

Development Fee

In September 2018, upon reaching a project development milestone, Tsugaru paid a development fee of approximately \$15 million to an affiliate of Pattern Development. Due to the Company's equity ownership in Pattern Development, the Company has eliminated its portion of the profits realized by Pattern Development with respect to this transaction.

PSP Investments Joint Venture

In June 2017, the Company entered into a Joint Venture Agreement with PSP Investments pursuant to which PSP Investments will have the right to co-invest up to an aggregate amount of approximately \$500 million in projects acquired by the Company under Project Purchase Rights with the Pattern Development Companies, including investments in Meikle, MSM and Panhandle 2. PSP Investments acquired a 49% interest in Meikle and 49% of Class B membership in Panhandle 2 in 2017 and 49% interest in MSM and 49% of Class B membership in Stillwater in 2018. Prior to December 31, 2018, PSP Investments previously purchased approximately 9 million shares of the Company's common stock from Pattern Energy Group LP and an additional approximately 600,000 shares from the Company.

Sponsor Services Agreement

On June 16, 2017, the Company entered into a Sponsor Services Agreement with PSP Investments, pursuant to which the Company will provide certain mutually agreed services to PSP Investments and its affiliates with respect to the administration of the joint ownership of the project companies that PSP Investments invests in alongside the Company pursuant to the PSP Investments Joint Venture Agreement in exchange for certain fees set forth in the Sponsor Services Agreement. Related party fee amounts recorded during 2018 and 2017 were immaterial.

21. Segment Reporting

The Company defines its operating segments to reflect the manner in which the Company's chief operating decision maker, the chief executive officer, evaluates performance and allocates resources in managing the business. The Company evaluates its operations in two reportable segments: (i) the operating business segment, which is comprised of the portfolio of renewable energy power projects and (ii) the development investment, which consists of the Company's investment in Pattern Development. The operating business segment is engaged in the sale of energy from the power projects. The development investment segment develops and sells renewable energy projects and consists solely of the Company's proportional share of its investment in Pattern Development. Corporate, other and eliminations includes operating companies that provide services to the Company's renewable energy power projects, various Pattern Energy Group LP subsidiaries, and Pattern Development and its equity losses in Pattern Development, and is presented to reconcile to the consolidated financial statements.

The chief operating decision maker evaluates segment performance based on segment Adjusted EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization). The Company defines Adjusted EBITDA as net income (loss) before net interest expense, income taxes, and depreciation, amortization and accretion, including its proportionate share of net income (loss) before interest expense, income taxes, and depreciation, amortization and accretion of unconsolidated investments. Adjusted EBITDA also excludes the effect of certain mark-to-market adjustments, gain or loss related to acquisitions, divestitures, or refinancing transactions, adjustments from unconsolidated investments, and infrequent items not related to normal or ongoing operations. In calculating Adjusted EBITDA, the Company excludes mark-to-market adjustments to the value of the Company's derivatives because the Company believes that it is useful for investors to understand, as a supplement to net income (loss) and other traditional measures of operating results, the results of the Company's operations without regard to periodic, and sometimes material, fluctuations in the market value of such assets or liabilities.

Prior to 2018, the Company had one reportable segment. The development investment segment was acquired in July 2017 and had insignificant operations in 2017. As such, comparative periods are not material or meaningful.

Segment information for the year ended December 31, 2018 is presented in the table below. For the Year Ended December 31, 2018

(in millions)	Operation Business				Corporate, Other and Elimination	R A	econcil mounts	ling S(2)	Consolid	ated
Total revenue	\$ 475	\$	39		\$8	\$	(39) \$	483	
Depreciation, amortization and accretion	\$ 247	\$	_		\$ 3	\$		\$	3 250	
Impairment expense	\$ <i>—</i>	\$	11		\$ 7	\$	(11) \$	5 7	
Operating income (loss)	\$ 45	\$	(33)	\$ (43) \$	33	9	5 2	
Earnings (loss) in unconsolidated investments ⁽³⁾	\$41	\$	1		\$ (40) \$	(1) \$	5 1	
Interest expense	\$ 63	\$	1		\$ 46	\$	(1) \$	5 109	
Income tax provision	\$ 11	\$	1		\$ 21	\$	(1) \$	32	
Net income (loss)	\$ (38)\$	(35)	\$ (31) \$	35	9	6 (69)
Adjusted EBITDA	\$ 391	\$	(22)	\$ (19) \$	22			
Capital expenditures	\$ (175)\$	(61)	\$ (6) \$	61	\$	5 (181)
As of December 31, 2018										
Property, plant and equipment, net	\$4,054	\$	2		\$ 65	\$	(2) \$	4,119	
Unconsolidated investments	\$ 228	\$	10		\$ 42	\$	(10) \$	3 270	
Total assets	\$8,990	\$	187		\$ (3,696) \$	(187) \$	5,294	

⁽¹⁾ Amounts represent the Company's proportionate share in Pattern Development.

⁽²⁾ The Company accounts for its investment in Pattern Development under the equity method. Therefore, the reconciling amounts are presented to eliminate Pattern Development and to reconcile to the consolidated totals.

⁽³⁾ Included in Corporate, Other and Eliminations is a \$35 million loss related to the Company's portion of the loss of Pattern Development and the elimination of intra entity profits of approximately \$5 million.

Reconciliation of segment Adjusted EBITDA to the Company's consolidated net loss for the year ended December 31, 2018 is as follows:

(in millions)	Year ended Decemb 31, 2018	
Operating Business Adjusted EBITDA	\$ 391	
Development Investment Adjusted EBITDA	(22)
Corporate, Other and Eliminations Adjusted EBITDA	(19)
Reconciling Amounts Adjusted EBITDA	22	
Less, proportionate share from unconsolidated investments		
Interest expense, net of interest income	(38)
Income tax provision	(1)
Depreciation, amortization and accretion	(35)
Gain on derivatives	1	
Unrealized loss derivatives	(5)
Early extinguishment of debt	(6)
Impairment expense	(7)
Other	(2)
Gain on asset sales	71	
Interest expense, net of interest income	(107)
Depreciation, amortization and accretion	(280)
Net loss before income tax	(37)
Income tax provision	(32)
Net loss	(69)

22. Selected Quarterly Financial Data (Unaudited)

The following tables summarize the Company's unaudited quarterly consolidated statements of operations for each of the eight quarters in the two year period ended December 31, 2018. The quarterly consolidated statements of operations data were prepared on a basis consistent with the audited consolidated financial statements included in this Annual Report on Form 10-K.

Quarterly financial data in millions, except per share data:

	Three months ended							
	Decemb	eı	Septemb	er	June 30,		March	
	31,		30,		June 30,		31,	
	2018		2018		2018		2018	
Revenue	\$113		\$118		\$140		\$112	
Gross profit (loss)	\$(14)	\$20		\$44		\$14	
Net loss	\$(22)	\$ (32)	\$(2)	\$(13)
Net loss attributable to noncontrolling interests ⁽¹⁾	\$(9)	\$(19)	\$(34)	\$(149)
Net income (loss) attributable to Pattern Energy	\$(13)	\$(13)	\$32		\$136	
Earnings (loss) per share								
Basic	\$(0.15)	\$(0.13)	\$0.34		\$1.39	
Diluted	\$(0.15)	\$(0.13)	\$0.34		\$1.32	
Cash dividends declared per Class A common share	\$0.4220)	\$0.4220		\$0.4220		\$0.4220	

As discussed in Note 16. Stockholders' Equity, for the three months ended March 31, 2018, included in net loss attributable to noncontrolling interests is a one-time adjustment of \$150 million as a result of the decrease in the federal corporate income tax rate.

Three months ended

December September

June 30, March
31, 30, 31,

	2017		2017		2017		2017	
Revenue	\$110		\$92		\$108		\$101	
Gross profit (loss)	\$16		\$(2)	\$21		\$28	
Net income (loss)	\$(22)	\$ (48)	\$(15)	\$3	
Net loss attributable to noncontrolling interests	\$(14)	\$(18)	\$(29)	\$(3))
Net income (loss) attributable to Pattern Energy	\$(8)	\$ (30)	\$14		\$6	
Basic and diluted earnings (loss) per share—Class A common stock	\$(0.08)	\$ (0.34)	\$0.16		\$0.06	
Cash dividends declared per Class A common share	\$0.4220)	\$0.4200		\$0.4180		\$0.4138	

23. Subsequent Events

On January 29, 2019, PG&E filed for protection under Chapter 11 of the U.S. Bankruptcy Code. Hatchet Ridge, a 101 MW wind project, sells all of its output to PG&E through 2025 under a long-term PSA. As of December 31, 2018, Hatchet Ridge had approximately \$138 million of net long-lived assets. The Company has also assessed and determined that Hatchet Ridge's long-lived assets are not impaired as of December 31, 2018. The Company is monitoring the bankruptcy proceedings for any changes in circumstances that would indicate the carrying amount of the net long-lived assets of Hatchet Ridge may not be recoverable.

On February 22, 2019, the Company approved a dividend for the first quarter 2019, payable on April 30, 2019, to holders of record on March 29, 2019, in the amount of \$0.4220 per Class A share, which represents \$1.688 on an annualized basis.

South Kent Wind LP

Financial Statements

in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP)

December 31, 2018

(In thousands of Canadian Dollars)

South Kent Wind LP

Contents	Page
Independent Auditor's Report	<u>S-3</u>
Financial Statements	
Balance Sheets Statements of Operations and Comprehensive Income Statements of Changes in Partners' Equity Statements of Cash Flows Notes to Financial Statements	<u>S-4</u> <u>S-5</u> <u>S-6</u> <u>S-7</u> <u>S-8</u>
S-2	

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Partners of South Kent Wind LP

Opinion on the financial statements

We have audited the accompanying balance sheet of South Kent Wind LP (the Partnership) as of December 31, 2017, and the related statements of operations and comprehensive income, statements of changes in partners' equity, and statements of cash flows for the years ended December 31, 2017 and 2016, including the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2017, and its results of operations and its cash flows for the years ended December 31, 2017 and 2016 in conformity with accounting principles generally accepted in the United States of America (US GAAP).

Basis for opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Change in accounting principle

As discussed in Note 2 to the financial statements, the Partnership changed the manner in which it accounts for restricted cash in the statements of cash flows in 2018, 2017 and 2016.

Other matters

The accompanying balance sheet of the Partnership as of December 31, 2018, and the related statements of operations and comprehensive income, statement of changes in partners' equity and statement of cash flows for the year ended December 31, 2018 are presented for purposes of complying with Rule 3-09 of SEC Regulation S-X; however, Rule 3-09 does not require the 2018 financial statements to be audited and they are therefore not covered by this report.

/s/ PricewaterhouseCoopers LLP Chartered Professional Accountants, Licensed Public Accountants Toronto, Canada

February 20, 2018, except for the change in the manner in which the Partnership accounts for restricted cash in the statements of cash flows discussed in Note 2 to the financial statements, as to which the date is February 15, 2019

We have served as the Partnership's auditor since 2011.

South Kent Wind LP Balance Sheets

As of December 31, 2018* and 2017

(In thousands of Canadian Dollars)		
	2018*	2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$21,888	\$12,842
Restricted cash (note 3)	_	1,982
Accrued revenue (note 2)	14,597	20,911
Other current assets	338	386
Total current assets	36,823	36,121
Property, plant and equipment - net of accumulated depreciation of \$145,511 and \$116,245 in 2018 and 2017, respectively (note 4)	591,698	620,841
Intangible assets - net of accumulated amortization of \$855 and \$812 in 2018 and 2017, respectively (note 5)	583	626
Total assets	\$629,104	\$657,588
LIABILITIES & EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities	\$3,837	\$3,187
Accounts payable and other accrued liabilities - related parties (note 11)	193	217
Current portion of long-term debt, net of financing costs of \$3,163 and \$3,296 in 2018 and 2017,	24,980	23,523
respectively (notes 2 and 6)	24,960	23,323
Current portion of contingent liabilities (note 10)	544	541
Derivative liabilities, current (note 8)	3,996	6,415
Other current liabilities	77	235
Total current liabilities	33,627	34,118
Long-term debt, net of financing costs of \$4,932 and \$8,095 in 2018 and 2017, respectively	556,047	581,027
(notes 2 and 6) Long-term contingent liabilities, net of current (note 10)	7,000	7,500
Derivative liabilities (note 8)	17,444	19,384
Asset retirement obligation (note 7)	6,853	6,493
Total liabilities	620,971	648,522
Commitments and contingencies (note 10)	020,771	010,522
Equity:		
Partners' capital	(193,110)	(130,122)
Accumulated net income	201,243	139,188
Total partners' equity	8,133	9,066
Total liabilities and equity	•	\$657,588
*Not covered by the auditor's report		

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

South Kent Wind LP Statements of Operations and Comprehensive Income For the years ended December 31, 2018*, 2017 and 2016

2018^* 2017 2016
Revenue (note 2):
Energy delivered \$94,234 \$65,867 \$87,142
Compensation for forgone energy 35,449 64,739 38,326
Other revenue 2,113 2,376 2,297
Total revenue 131,796 132,982 127,765
Cost of revenue:
Project expenses 10,439 10,900 13,064
Project expenses - related parties (note 11) 1,519 1,491 1,469
Depreciation, amortization and accretion 29,669 29,662 29,698
T-4-1 4 - 5 44 221
Total cost of revenue 41,627 42,053 44,231 Gross profit 90,169 90,929 83,534
Operating expenses:
General and administrative 374 524 504
General and administrative - related parties (note 11) 533 523 516
Total operating expenses 907 1,047 1,020
Operating income 89,262 89,882 82,514
Other expense: Interest expense (note 6) (30,628) (31,477) (32,596)
Unrealized gain on derivatives (note 8) 4,359 22,474 3,269
Other expense, net (938) (934) (911)
Total other expense (27,207) (9,937) (30,238)
Net income 62,055 79,945 52,276
Other comprehensive income
Comprehensive income \$62,055 \$79,945 \$52,276

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

South Kent Wind LP Statements of Changes in Partners' Equity For the years ended December 31, 2018*, 2017 and 2016

(In thousands of Canadian Dollars)			
	Partners' capital	Accumulated net income	Total
Balance at January 1, 2016	2,700	6,967	9,667
Cash distribution	(64,430)	_	(64,430)
Net income	_	52,276	52,276
Balance at December 31, 2016	(61,730)	59,243	(2,487)
Cash distribution	(68,392)	_	(68,392)
Net income		79,945	79,945
Balance at December 31, 2017	(130,122)	139,188	9,066
Cash distribution	(62,988)	· —	(62,988)
Net income	_	62,055	62,055
Balance at December 31, 2018*	\$(193,110)	\$ 201,243	\$8,133
*Not covered by the auditor's re	port		

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

South Kent Wind LP Statements of Cash Flows For the years ended December 31, 2018*, 2017 and 2016

(In thousands of Canadian Dollars)			
	2018*	2017 Postated	2016 Restated
Cash flows from operating activities:		Restateu	Restated
Net income	\$62,055	\$79,945	\$52,276
Adjustment to reconcile net income to net cash provided by operating activities: Unrealized gain on derivatives	(4,359)	(22,474)	(3,269)
Depreciation, amortization and accretion	29,668	29,662	29,698
Amortization of deferred financing costs Changes in assets and liabilities, net:	3,297	3,426	3,546
Accrued revenue	6,314	794	(3,539)
Accounts payable and other accrued liabilities Other, net	629 (111)	(3) 118	103 181
Net cash provided by operating activities	97,493	91,468	78,996
Cash flows from investing activities:	((22)	((10)	(4.2.47)
Capital expenditures	(622)	(610)	(4,247)
Net cash used in investing activities	(622)	(610)	(4,247)
Cash flows from financing activities:			
Repayment of long-term debt		(25,773)	
Distribution to partners	(62,988)	(68,392)	(64,430)
	(89,807)	(94,165)	(86,539)
Net change in cash and cash equivalents	7,064	(3,307)	(11,790)
Cash, cash equivalents and restricted cash - Beginning	14,824	18,131	29,921
Cash, cash equivalents and restricted cash - Ending	\$21,888	\$14,824	\$18,131
Supplemental disclosure:			
Cash payments for interest and commitment fees	\$27,486	\$27,978	\$28,894
*Not covered by the auditor's report			
See accompanying notes to financial statements.			

South Kent Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

1 General information

The Partnership

South Kent Wind LP (the Partnership), a limited partnership under the laws of the Province of Ontario, was formed on January 10, 2011, as a joint venture project between Samsung Renewable Energy Inc. (Samsung) and Pattern South Kent LP Holdings LP, a subsidiary of Pattern Renewable Holdings Canada ULC (PRHC), each as 49.99% limited partners of the Partnership, and South Kent Wind GP Inc. (the GP), as the 0.02% general partner of the Partnership. The Partnership was created to develop, build and operate a wind power project in the Regional Municipality of Chatham-Kent with generation capacity totaling approximately 270 megawatts (MW) of power (the Project). On February 24, 2013, Samsung transferred all of its LP interest in the Partnership to SRE SKW LP Holdings LP, an affiliate of Samsung.

On October 2, 2013, in a series of transactions: (i) Pattern South Kent GP Holdings Inc., a wholly owned subsidiary of PRHC, transferred all of the general partner interests in Pattern South Kent LP Holdings LP to PRHC, causing Pattern South Kent LP Holdings LP to be dissolved by operation of law and PRHC to acquire the LP interests in the Partnership that previously were held by Pattern South Kent LP Holdings LP; (ii) PRHC transferred its LP interest in the Partnership and its ownership interest in Pattern South Kent GP Holdings Inc., which owned PRHC's ownership interest in the GP, to Pattern Canada Operations Holdings ULC (PCOH), a wholly owned subsidiary of Pattern Energy Group Inc. (Pattern); and (iii) Pattern South Kent GP Holdings Inc. was dissolved.

On December 17, 2014, PCOH transferred all of its LP interest in the Partnership to Pattern Canada Finance Company ULC, a wholly owned subsidiary of PCOH.

The Partnership is controlled by its general partner, the GP, also a joint venture controlled by affiliates of Samsung and Pattern. As of December 31, 2018 and 2017, the Partnership's ownership interests were distributed as follows:

2017

2018

 SRE SKW LP Holdings LP
 49.99%
 49.99%

 Pattern Canada Finance Company ULC
 49.99
 49.99

 South Kent Wind GP Inc.
 0.02
 0.02

 Total
 100.00%
 100.00%

The Project

The Project is a 270 MW wind project consisting of 124 Siemens wind turbine generators located in the Regional Municipality of Chatham-Kent, Ontario. On March 28, 2014 the Project achieved the Commercial Operation Date ("COD") and commenced commercial operations.

The Partnership has a power purchase agreement ("PPA") with the Independent Electricity System Operator (IESO) for a period of 20 years from the COD. The IESO oversees the wholesale electricity market, where the price of energy is determined. It also administers the rules that govern the market and, through an arm's-length market monitoring function, ensures that it is operated fairly and efficiently. The IESO is an agent among the market participants in Ontario and is neither exposed to, nor benefits from, any transactions. In such capacity, the IESO executes agreements to help the market meet the renewable energy mandates of the government of the Province of Ontario. There are approximately 70 electric distribution companies in Ontario, all of which have government mandates to purchase renewable energy. The PPA provides for guaranteed pricing from IESO that removes volatility caused by fluctuations in market rates. The Ontario government established the Global Adjustment ("GA") which is designed to adjust consumer rates depending on the price of energy. The IESO establishes a monthly variable GA rate based on GA costs and Ontario electricity demand which effectively establishes a pass through mechanism to the consumer and eliminates the IESO's economic exposure to our contract price.

South Kent Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

2 Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to the periods presented, unless otherwise stated.

Basis of preparation

The accompanying financial statements are presented using accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of U.S. GAAP financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Because the use of estimates is inherent in the financial reporting process, actual results could differ from those estimates.

In recording transactions and balances resulting from business operations, the Partnership uses estimates based on the best information available. Estimates are used for such items as accrued revenue, asset retirement obligation, valuation of derivative contracts and contingencies.

These financial statements do not include assets, liabilities, revenue and expenses of the GP and limited partners. The financial statements of the Partnership reflect no provision or liability for income taxes because profits and losses of the Partnership are allocated to the partners and are included in the income tax returns of the partners. Income and losses for tax purposes may differ from the financial statement amounts and the partners' equity reflected in the financial statements does not necessarily reflect their tax basis.

Functional and presentation currency

Items included in the financial statements of the Partnership are measured using the currency of the primary economic environment in which the Partnership operates (the functional currency). The financial statements are presented in Canadian Dollars, which is the Partnership's functional and presentation currency.

Fair value of financial instruments

ASC 820, Fair Value Measurements, defines fair value as the price at which an asset could be exchanged or a liability transferred in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or derived from such prices. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

Restricted cash

Restricted cash mainly consists of cash reserves required under the Partnership's loan agreements and security deposits required to collateralize commercial bank letter of credit facilities related to easement rights (note 3).

Reconciliation of cash and cash Equivalents and restricted cash as presented on the statements of cash flows

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

	December 31		
	2018	2017	2016
Beginning			
Cash and cash equivalents at beginning of period			
	\$12,842	\$16,074	\$23,370
Restricted cash - current	1,982	2,057	6,551
Restricted cash			
Cash, cash equivalents and restricted cash	\$14,824	\$18,131	\$29,921
Ending			
Cash and cash equivalents at end of period	\$21.888	\$12,842	\$16,074
	Ψ21,000	Ψ12,012	Ψ10,074
Restricted cash - current		1,982	2,057
Restricted cash	_	_	_
Cash, cash equivalents and restricted cash	\$21,888	\$14,824	\$18,131
Net change in cash, cash equivalents and restricted cash	\$7,064	\$(3,307)	\$(11,790)

Trade receivables

The Partnership's trade receivables are generated by selling energy in Ontario, Canada through the IESO as a settlement agent. The allowance for doubtful accounts, if needed, is computed based upon management's estimates of uncollectible accounts. As of December 31, 2018 and 2017, the Partnership has no outstanding trade receivables.

Accrued revenue

Accrued revenue represents revenues recognized on contracts for which billings have not been presented to customers as of the balance sheet date. These amounts are billed and generally collected within two months.

Concentration of credit risk

Financial instruments that potentially subject the Partnership to concentrations of credit risk consist primarily of cash and cash equivalents and restricted cash. The Partnership places its cash and cash equivalents and restricted cash with creditworthy institutions located in Canada, which the management believes to have minimal risk. At times, such balances may be in excess of the Canada Deposit Insurance Corporation (CDIC) insurance coverage limit. CDIC insurance currently covers up to \$100 per depositor at each insured bank.

The Partnership's derivative agreements expose the Partnership to losses under certain circumstances, such as the counterparty defaulting on its obligations under the swap agreements or if the swap agreements provide an imperfect hedge. Counterparties to the Partnership's derivative contracts are major financial institutions that have been accorded investment grade ratings.

Property, plant and equipment

Property, plant and equipment are stated at historical cost, less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying value or recognized as separate assets, as appropriate, only when it is probable that the future economic benefits associated with the item will flow to the Partnership and the cost of the item can be reliably measured. The asset retirement obligation included in property, plant and equipment is stated at the present value of future cash flows of asset retirement obligation at the time of COD.

Depreciation on property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives. The power plant is depreciated over 25 years and the remaining assets are depreciated over 5 years. The assets' residual values and useful lives are reviewed and adjusted, if appropriate, at the end of each reporting period. Repair and maintenance costs are expensed as incurred.

South Kent Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

Intangible assets (lease options)

Lease options are recognized at fair value at the acquisition date and subsequently accounted for at cost. Lease options have a finite useful life and are carried at cost less accumulated amortization. Amortization is calculated using the straight-line method to allocate the cost of lease options over the period of expected future benefit (i.e., the contract period of each lease option). Separately acquired lease options are capitalized on the basis of the costs incurred to enter into the respective contract.

Impairment of long-lived assets

The Partnership periodically evaluates whether events have occurred that would require revision of the remaining useful life of equipment and improvements and purchased intangible assets or render them not recoverable. If such circumstances arise, the Partnership uses an estimate of the undiscounted value of expected future operating cash flows to determine whether the long-lived assets are impaired. If the aggregate undiscounted cash flows are less than the carrying amount of the assets, the resulting impairment charge to be recorded is calculated based on the excess of the carrying value of the assets over the fair value of such assets, with the fair value determined based on an estimate of discounted future cash flows. Through December 31, 2018, no impairment charges were recorded.

Deferred financing costs

Financing costs incurred in connection with obtaining construction and term financing, which include direct financing, legal and other upfront costs of borrowing, are capitalized and recorded as a reduction to long-term debt and amortized over the lives of the respective loans using the effective-interest method. Amortization of deferred financing costs is capitalized during construction or expensed following COD.

Derivatives

The Partnership recognizes its derivative instruments as either assets or liabilities in the balance sheets at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it qualifies and has been designated as part of a hedging relationship and, further, on the type of hedging relationship. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that are attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income (OCI). Changes in the fair value of these derivatives are subsequently reclassified into earnings in the period the hedged transaction affects earnings. The ineffective portion of changes in fair value is recorded as a component of net income in the statements of operations and comprehensive income.

For undesignated derivative instruments, their change in fair value is reported as a component of net income in the statements of operations and comprehensive income.

The Partnership enters into derivative transactions for the purpose of managing exposure to fluctuations in interest rates, such as interest rate swaps. Interest rate swaps are instruments used to fix the interest rate on variable interest rate debt.

Accounts payable and other accrued liabilities

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Payables with payment terms extended beyond one year from the balance sheet dates are presented as non-current liabilities.

Contingent liabilities

Contingent liabilities are recognized when: the Partnership has a present legal obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reasonably estimated.

Asset retirement obligation

South Kent Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

The Partnership records an asset retirement obligation for the estimated costs of decommissioning turbines, removing above-ground installations and restoring sites, at the time when a contractual decommissioning obligation materializes. The Partnership records accretion expense, which represents the increase in the asset retirement obligation, over the remaining life of the associated wind project. Accretion expense is recorded as cost of revenue in the statements of operations and comprehensive income using accretion rates based on a credit adjusted risk free interest rate of 5.54%.

Revenue recognition

Revenue is recognized based upon the amount of electricity delivered or curtailed at rates specified under the contracts, assuming all other revenue recognition criteria are met. When curtailment revenue is earned, it is recorded as compensation for forgone revenue. The Partnership evaluates its PPA to determine whether it is in substance a lease or derivative and, if applicable, recognizes revenue pursuant to ASC 840, Leases and ASC 815, Derivatives and Hedging, respectively. As of December 31, 2018, the PPA was not considered a lease or a derivative instrument, as multiple market participants purchase the energy at market-based prices with IESO working as a settlement agent. As a result, revenue (including any revenue from the price guaranteed by IESO), is recognized on an accrual basis. The Partnership recognizes revenue under other revenue for warranty settlements and liquidated damages from a turbine manufacturer upon resolution of outstanding contingencies and for economic development adder from the IESO based on the amount of energy delivered. Any cash receipts for amounts subject to future adjustment or repayment are deferred in other liabilities until the final settlement amount is considered fixed and determinable. Cost of revenue

The Partnership's cost of revenue is comprised of direct costs of operating and maintaining its project facilities, including labor, turbine service arrangements, metering service and shadow settlement, environmental fee, land lease royalties, property tax, insurance, depreciation, amortization and accretion.

Comprehensive income

Comprehensive income consists of net income and other comprehensive income. Other comprehensive income is included in accumulated other comprehensive income in the accompanying statements of changes in partners' equity. Recently adopted accounting standard

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. As a result, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments do not provide a definition of restricted cash or restricted cash equivalents. The Company elected to early adopt the provisions of ASU 2016-18 as of December 31, 2018 and has restated its statements of cash flows for the years ended December 31, 2017 and 2016 to reflect amounts described as restricted cash and restricted cash equivalents included with cash and cash equivalents in the reconciliation of beginning of period and end of period total amounts shown on the statements of cash flows. Consequently, transfers between cash and restricted cash will not be presented as a separate line item in the operating, investing or financing sections of the cash flow statement. A reconciliation of cash and cash equivalents and restricted cash as presented on the balance sheets to the statements of cash flows is included in the significant accounting policies above.

Recent accounting pronouncements

In August 2018, the FASB issued ASU 2018-13, Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13), which amends changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty which should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. ASU 2018-13 is effective for annual periods beginning after December 15, 2019, including interim periods within those periods. Early application is permitted. The Partnership is currently

assessing the impact of changes to the disclosure requirements for fair value measurement.

South Kent Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

In February 2017, the FASB issued ASU 2017-05, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASU 2017-05). ASU 2017-05 is meant to clarify the scope of ASC Subtopic 610-20, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets and to add guidance for partial sales of nonfinancial assets. ASU 2017-05 is to be applied using a full retrospective method or a modified retrospective method as outlined in the guidance and is effective at the same time as ASU 2014-09. Further, the Partnership is required to adopt this guidance at the same time that it adopts the guidance in ASU 2014-09 which creates ASC Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09). The Partnership has assessed the future impact of this guidance on its financial statements and related disclosures and expects to adopt these updates beginning January 1, 2019. The adoption of ASU 2017-05 is not expected to have a material impact on its financial statements and related disclosures. In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts, ASU 2016-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The adoption of ASU 2016-13 is not expected to have a material impact on its financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (ASU 2016-02), which requires lessees to recognize right-of-use assets and lease liabilities, for all leases, with the exception of short-term leases, at the commencement date of each lease. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 simplifies the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and liabilities. ASU 2016-02 is effective for annual periods beginning after December 15, 2019 for non-public entities. Early adoption is permitted. The amendments of this update should be applied using a modified retrospective approach, which requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented. The Partnership is currently in the initial stages of evaluating the impact of the new standard on its accounting policies, processes and system requirements. The Partnership is also assessing the future accounting impact of this update on its financial statements and related disclosures as it applies to its PPA, land lease arrangements and other lease arrangements. As the Partnership progresses further in its analysis, the scope of this assessment could be expanded to review other types of contracts.

In May 2014, the FASB issued ASU 2014-09, which creates FASB Accounting Standards Codification (ASC) Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09). The new standard replaces industry-specific guidance and establishes a single five-step model to identify and recognize revenue. The core principle of the new standard is that an entity should recognize revenue upon transfer of control of promised goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. Additionally, the new standard requires the entity to disclose further quantitative and qualitative information regarding the nature and amount of revenues arising from contracts with customers, as well as other information about the significant judgments and estimates used in recognizing revenues from contracts with customers. The partnership expects to adopt these updates beginning January 1, 2019. The adoption of ASC 606 has been assessed and determined that there will not be a material impact on the financial statements.

3 Restricted cash

The following table presents the components of restricted cash:

December

31

20087

 $\begin{array}{lll} \mbox{Completion reserve account} & -\$1,982 \\ \mbox{Subtotal} & -1,982 \\ \mbox{Less: Current portion} & -(1,982) \end{array}$

Restricted cash, non-current —

The amount in the completion reserve account is reserved to pay outstanding project costs specified during term conversion (note 6). Upon full payment of outstanding project costs, the remaining balance was released from restricted cash in 2018.

4Property, plant and equipment

The following is a summary of property, plant and equipment, at cost less accumulated depreciation, at:

December 31. 2018 2017 Power plant \$731,212 \$731,212 Furniture, fixtures and equipment 501 501 Asset retirement obligation - asset 5,263 5.263 Capital spares 233 110 Subtotal 737,209 737,086 Less: Accumulated depreciation (145,511) (116,245)\$591,698 \$620,841

Depreciation expense of \$29,266, \$29,279 and \$29,332 was charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively. 5 Intangible assets

	December		
	31,		
	2018	2017	
Beginning net book value	626	668	
Amortization expense	(43)	(42)	
Closing net book value	583	626	

December 31,
2018 2017
Cost 1,438 1,438
Accumulated amortization (855) (812)
Net book value 583 626

Amortization expense of \$43, \$42 and \$43 was charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

6Long-term debt

Upon achievement of the COD on March 28, 2014, and the construction facility converted to a term loan on August 28, 2014. On May 7, 2015, the Partnership amended the credit agreement to reduce the related interest rate to Canadian Dealer Offered Rate (CDOR) plus 1.625% per annum. A fee facility was added with a principal amount of \$5,106 to cover all fees for the amendment. The modifications have resulted in a current effective interest rate of 3.935% with a maturity date of August 2021. In connection with the credit agreement, the Partnership entered into interest rate swaps that would fix the interest rate for 90% of the outstanding notional amount.

Collateral under the financing agreement consists of substantially all of the Partnership's assets. Its loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict the Partnership's ability to incur debt, grant liens, sell or lease assets, transfer equity interest, dissolve, pay distributions and change its business. The Partnership is in compliance with all loan covenants. All of the limited and general partners and shareholders of general partners pledged shares of partnership units or common stock owned as collateral for the loan.

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016

(In thousands of Canadian Dollars)

Terms and conditions of outstanding borrowings were as follows:

As of December 31, 2018

Deferred Net of

Principal financing financing Interest rate Maturity date

costs costs

Term loan \$589,122 \$(8,095) \$581,027 3.935% August 2021

Less: current portion (28,143) 3,163 (24,980)Net of current \$560,979 \$(4,932) \$556,047

As of December 31, 2017 Deferred Net of

Principal financing financing Interest rate Maturity date

costs costs

Term loan \$615,941 \$(11,391) \$604,550 3.175% August 2021

(26,819) 3,296 Less: current portion (23,523)\$589,122 \$(8,095) \$581,027 Net of current

Future maturities of long-term debt are as follows as of December 31, 2018:

2019 \$28,143 2020 29,974 37,033 2021 2022 34,900 2023 37,859 Thereafter 421,213

\$589,122

The following table presents a reconciliation of interest expense presented in the Partnerships' statements of operations and comprehensive income for the years ended December 31:

2018 2017 2016 Interest incurred \$27,331 \$28,051 \$29,050 Amortization of deferred financing costs 3,297 3,426 3,546 \$30,628 \$31,477 \$32,596 Interest expense

Letters of credit facilities

On August 28, 2014, letters of credit of \$40,600 and \$12,000 were issued upon term conversion for a debt service reserve and operations and maintenance reserve, respectively, with a seven-year term. Funds, when and if drawn on the facility, accrue interest at 0.625% plus Prime Rate, and at the partners' option, the rate can be converted to a rate of CDOR plus 1.625% per annum. In addition, the Partnership shall pay letter of credit fees on the basis of the undrawn amount of the facility at 1.625% per annum. As of December 31, 2018 and 2017, the letters of credit facility did not have an outstanding balance, and no amounts were drawn in 2018 and 2017. Letter of credit fees of \$855, \$855 and \$857 were charged to other expense in the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

7 Asset retirement obligation

The Partnership's asset retirement obligation represents the estimated cost of decommissioning the turbines, removing above-ground installations and restoring the sites at the end of its estimated useful life.

The following table presents a reconciliation of the beginning and ending aggregate carrying amounts of the asset retirement obligation:

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016

(In thousands of Canadian Dollars)

December 31,

2018 2017

Asset retirement obligation - Beginning of year \$6,493 \$6,153

Accretion expense 360 340

Asset retirement obligation - End of year \$6,853 \$6,493

8 Derivatives

The Partnership uses interest rate derivatives to manage its exposure to fluctuations in interest rates. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon movement in market prices. The Partnership's objectives for holding these derivative instruments include reducing, eliminating and efficiently managing the economic impact of interest rate exposures as effectively as possible. The Partnership does not hedge all of its interest rate risks, thereby exposing the unhedged portions to changes in market prices.

The following tables present the fair values of the Partnership's derivative instruments on a gross basis as reflected on the Partnership's balance sheets:

December 31, December 31,

2018 2017
Derivative Derivative liabilities liabilities

Current Long-term Current Long-term

Fair value of undesignated derivatives:

Interest rate swaps \$3,996 \$ 17,444 \$6,415 \$ 19,384 Total fair value \$3,996 \$ 17,444 \$6,415 \$ 19,384

The following table summarizes the notional amounts of the Partnership's outstanding derivative instruments:

December 31,

Unit of measure 2018 2017

Undesignated derivative instruments

Interest rate swaps CAD \$525,614 \$549,751

The changes in the fair value of these swaps are recognized directly into earnings as follows:

December 31,

2018 2017 2016

Gains recognized in earnings \$4,359 \$22,4743,269

9Fair value measurement

The Partnership's fair value measurements incorporate various factors, including the credit standing and performance risk of the counterparties, the applicable exit market, and specific risks inherent in the instrument. Non-performance and credit risk adjustments on risk management instruments are based on current market inputs when available, such as credit default swap spreads. When such information is not available, internal models are used.

Assets and liabilities recorded at fair value in the financial statements are categorized based on the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to valuation of these assets or liabilities are as follows:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016

(In thousands of Canadian Dollars)

Level 2 - Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Short-term financial instruments consist principally of cash and cash equivalents, restricted cash, and accounts payable and other accrued liabilities. Based on the nature and short maturity of these instruments, their fair value is approximated using carrying cost and they are presented in the financial statements at carrying cost.

Long-term debt is presented on the balance sheets at amortized cost. The fair value of variable interest rate for long-term debt is approximated by its carrying cost.

Derivatives are presented in the financial statements at fair value. The interest rate swaps were valued by discounting the net cash flows using the forward CDOR curve with the valuations adjusted by the Project's credit default swap rate. The Partnership's financial assets (liabilities) which require fair value measurement on a recurring basis are classified within the fair value hierarchy as follows:

Level 1 Level 2 Level 3

December 31, 2018

Interest rate swaps \$- \$(21,440) \$
December 31, 2017

Interest rate swaps \$- \$(25,799) \$-

10Commitments and contingencies

1) Commitments

Land Lease Agreements

The Partnership has entered into various long-term land lease agreements. The annual fees range from minimum rent payments varying by lease to maximum rent payments of a certain percentage of energy delivered revenues, varying by lease.

Lease payments, including amortization of the lease option, of \$3,436, \$2,392 and \$2,949 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

The future payments related to these leases as of December 31, 2018 are as follows:

2019 \$4,163 2020 4,180 2021 4,198 2022 4,220 2023 4,244 Thereafter 44,113 Total \$65,118

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016

(In thousands of Canadian Dollars)

Service and Maintenance Agreement

The Partnership has entered into service and maintenance agreements with Siemens to provide and carry out turbine maintenance and service activities for the Project until April 2020. Based on the terms of the agreements, Siemens shall be entitled to receive a daily base fee per turbine that may be subject to periodic price adjustments for inflation, over the terms of the agreements. As of December 31, 2018, outstanding commitments with Siemens were \$4,343, including an estimated annual price adjustment for inflation of 2%, where applicable, payable over the full term of the agreement.

2) Contingencies

Community Fund Agreement

On April 17, 2013, the GP, in its capacity as general partner and on behalf of the Partnership, entered into the South Kent Wind Community Fund Agreement with Chatham-Kent Community Foundation, in which the Partnership committed to twenty annual contributions of \$500 plus an initial contribution of \$1,000. The remaining payments are recorded as a contingent liability in the amount of \$7,500.

Turbine Availability Warranty

The Partnership has a turbine availability warranty from its turbine manufacturer. Pursuant to the warranty, if a turbine operates at less than minimum availability during the warranty period, the turbine manufacturer is obligated to pay, as liquidated damages, an amount for each percent that the turbine operates below the minimum availability threshold. In addition, if a turbine operates at more than a specified availability during the warranty period, the Partnership has an obligation to pay a bonus to the turbine manufacturer. As of December 31, 2018, the Partnership recorded a liability of \$44 associated with bonuses payable to the turbine manufacturer.

11 Related party transactions

The Partnership is controlled by the GP, which is jointly controlled by Samsung and Pattern in accordance with the terms of the Shareholder Agreement. Certain terms of the Samsung Pattern Joint Venture Wind Development Agreement, entered into between Samsung and an affiliate of PRHC on July 27, 2010, directed the responsibilities of Samsung and PRHC for the Project.

The following transactions were carried out with related parties:

a) Management, Operation, and Maintenance Agreement (MOMA)

On March 8, 2013, the Partnership entered into a MOMA with Pattern Operators Canada ULC, which is owned by PCOH to operate and manage the maintenance of the wind plant and to perform certain other services pertaining to the wind plant in accordance with terms and conditions set forth in the MOMA.

\$1,519, \$1,491 and \$1,469 were charged to the project expense in the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

b) Project Administration Agreement (PAA)

On March 8, 2013, the Partnership entered into the PAA with SRE Wind PA LP (PA), which is 100% owned by Samsung to supply project administrative services.

\$533, \$523 and \$516 were invoiced to the Partnership for the years ended December 31, 2018, 2017 and 2016, respectively, and expensed as general and administrative expense in the statements of operations and comprehensive income.

c) The Partnership recorded the following balances with related parties:

South Kent Wind LP

Notes to Financial Statements

December 31, 2018 (not covered by the auditor's report), 2017 and 2016

(In thousands of Canadian Dollars)

Related party payable to Pattern Operators Canada ULC \$143 \$168 Related party payable to SRE Wind PA LP \$193 \$217

12 Subsequent events

The Partnership paid distributions to partners in the amount of \$19,310 on February 14, 2019.

Grand Renewable Wind LP Financial Statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP)

December 31, 2018 (In thousands of Canadian Dollars)

Grand Renewable Wind LP

Contents	Page
Independent Auditor's Report	<u>S-22</u>
Financial Statements	
Balance Sheets	S-23
Statements of Operations and Comprehensive Income	S-24
Statements of Changes in Partners' Equity	<u>S-25</u>
Statements of Cash Flows	<u>S-26</u>
Notes to Financial Statements	<u>S-27</u>

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Partners of Grand Renewable Wind LP

Opinion on the Financial Statements

We have audited the accompanying balance sheet of Grand Renewable Wind LP (the Partnership) as of December 31, 2017, and the related statements of operations and comprehensive income, statements of changes in partners' equity, and statements of cash flows for the years ended December 31, 2017 and 2016, including the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2017, and its results of operations and its cash flows for the years ended December 31, 2017 and 2016 in conformity with accounting principles generally accepted in the United States of America (US GAAP).

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Change in accounting principle

As discussed in Note 2 to the financial statements, the Partnership changed the manner in which it accounts for restricted cash in the statements of cash flows in 2018, 2017 and 2016.

Other matters

The accompanying balance sheet of the Partnership as of December 31, 2018, and the related statements of operations and comprehensive income, statement of changes in partners' equity and statement of cash flows for the year ended December 31, 2018 are presented for purposes of complying with Rule 3-09 of SEC Regulation S-X; however, Rule 3-09 does not require the 2018 financial statements to be audited and they are therefore not covered by this report.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Canada

February 20, 2018, except for the change in the manner in which the Partnership accounts for restricted cash in the statements of cash flows discussed in Note 2 to the financial statements, as to which the date is February 15, 2019 We have served as the Partnership's auditor since 2011.

Grand Renewable Wind LP Balance Sheets		
As of December 31, 2018* and 2017 (In thousands of Canadian Dollars)	2018*	2017
ASSETS Current assets:	2016	2017
Cash and cash equivalents Restricted cash (note 3) Accrued revenue (note 2) Other current assets Total current assets	\$5,079 4,339 6,396 300 16,114	\$2,563 4,336 11,043 312 18,254
Property, plant and equipment - net of accumulated depreciation of \$70,792 and \$53,439 in 2018 and 2017, respectively (note 4)	362,613	379,850
Intangible assets - net of accumulated amortization of \$341 and \$258 in 2018 and 2017, respectively (note 5)	1,331	1,414
Total assets	\$380,058	\$399,518
LIABILITIES & EQUITY Current liabilities: Accounts payable and other accrued liabilities	\$2,425	\$1,785
Accounts payable and other accrued liabilities - related parties (note 11) Current portion of long-term debt, net of financing costs of \$1,290 and \$1,356 in 2018 and	163 17,128	355 16,015
2017, respectively (notes 2 and 6) Derivative liabilities, current (note 8) Other current liabilities (note 10) Total current liabilities	3,346 86 23,148	4,811 603 23,569
Long-term debt, net of financing costs of \$2,997 and \$4,287 in 2018 and 2017, respectively (notes 2 and 6)	315,988	333,116
Derivative liabilities (note 8) Asset retirement obligation (note 7) Total liabilities	35,507 3,187 377,830	35,756 2,992 395,433
Commitments and contingencies (note 10)		
Equity: Partners' capital Accumulated net income Accumulated other comprehensive loss Total partners' equity Total liabilities and equity	(8,990) 19,930 (8,712) 2,228 \$380,058	8,350 8,148 (12,413) 4,085 \$399,518
*Not covered by the auditor's report See accompanying notes to financial statements.		
S-23		

Grand Renewable Wind LP Statements of Operations and Comprehensive Income For the years ended December 31, 2018*, 2017 and 2016 (In thousands of Canadian Dollars)

Revenue (note 2):	2018*	2017	2016
Energy delivered	\$47,623	\$39,693	\$44,353
Compensation for forgone energy	13,846	24,866	19,172
Other revenue	851	713	713
Total revenue	62,320	65,272	64,238
Cost of revenue:			
Project expenses	7,172	8,780	8,270
Project expenses - related parties (note 11)	1,301	1,277	1,258
Depreciation, amortization and accretion	17,548	17,562	17,545
Total cost of revenue	26,021	27,619	27,073
Gross profit	36,299	37,653	37,165
Operating expenses:	020	1.015	1 105
General and administrative	928	1,015	1,125
General and administrative - related parties (note 11)	426	419	412
Total operating expenses	1,354	1,434	1,537
Operating income	34,945	36,219	35,628
Other (expense):			
Interest expense (note 6)	(20,394)	(21,079)	(21,648)
Unrealized loss on derivatives (note 8)	(1,986)	(230)	(7,253)
Other (expense), net	(783)	(866)	(883)
Total other expense	(23,163)	(22,175)	(29,784)
Net income	11,782	14,044	5,844
Other comprehensive income (loss): Derivative activity (notes 8 and 10):			
Effective portion of change in fair value of derivatives	(1,420)	6,121	(826)
D 1 10 10 11			
Reclassifications to net income	5,121	7,568	8,582
Total change in effective portion of change in fair market value of derivatives	3,701	13,689	7,756
Comprehensive income	\$15,483	\$27,733	\$ 12 600
COMPICHEISIVE INCOME	D 1.2.403	$\Psi \angle I, I \supset \Im$	Φ 13,000

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

Grand Renewable Wind LP Statements of Changes in Partners' Equity For the years ended December 31, 2018*, 2017 and 2016 (In thousands of Canadian Dollars)

	Partners' capital	Accumulated net income (loss)	Accumulated other comprehensive loss	Total
Balance at January 1, 2016	47,680	(11,740)	(33,858)	2,082
Cash distribution	(19,450)	_	_	(19,450)
Other comprehensive income	_	_	7,756	7,756
Net income	_	5,844	_	5,844
Balance at December 31, 2016	28,230	(5,896)	(26,102)	(3,768)
Cash distribution	(19,880)	_	_	(19,880)
Other comprehensive income	_	_	13,689	13,689
Net income	_	14,044	_	14,044
Balance at December 31, 2017	8,350	8,148	(12,413)	4,085
Cash distribution	(17,340)	_	_	(17,340)
Other comprehensive income	_	_	3,701	3,701
Net income	_	11,782	_	11,782
Balance at December 31, 2018*	\$(8,990)	\$ 19,930	\$ (8,712)	\$ 2,228

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

Grand Renewable Wind LP Statements of Cash Flows For the years ended December 31, 2018*, 2017 and 2016 (In thousands of Canadian Dollars)

	2018^{*}	2017	2016
		Restated	Restated
Cash flows from operating activities:			
Net income	\$11,782	\$14,044	\$5,844
Adjustments to reconcile net income to net cash provided by operating activities			
Unrealized loss on derivatives	1,986	230	7,253
Depreciation, amortization and accretion	17,631	17,646	17,628
Amortization of deferred financing costs	1,356	1,413	1,248
Changes in assets and liabilities, net:		•	•
Accrued revenue	4,646	42	(1,855)
Accounts payable and other accrued liabilities	43	(28)	(4,546)
Other, net	(98)	88	210
Net cash provided by operating activities	37,346	33,435	25,782
	,	ŕ	•
Cash flows from investing activities:			
	(116)	(125)	(2,240)
• •	(116)	(125)	(2,240)
Cash flows from financing activities:			
· · · · · · · · · · · · · · · · · · ·	(17,371)	(14,538)	(13,897)
		(19,880)	
•	(34,711)	(34,418)	(33,347)
· ·	, , ,	, , ,	
Net change in cash and cash equivalents	2,519	(1,108)	(9,805)
	6,899	8,007	17,812
	\$9,418	\$6,899	
	•	•	
Supplemental disclosure:			
* *	\$19,147	\$19,615	\$20,291
* •	•	,	*
See accompanying notes to financial statements.			
Cash flows from investing activities: Capital expenditures Net cash used in investing activities Cash flows from financing activities: Repayment of long-term debt Distribution to partners Net cash used in financing activities Net change in cash and cash equivalents Cash, cash equivalents and restricted cash - Beginning Cash, cash equivalents and restricted cash - Ending Supplemental disclosure: Cash payments for interest and commitment fees *Not covered by the auditor's report See accompanying notes to financial statements.	(17,371) (17,340) (34,711) 2,519 6,899 \$9,418	(125) (14,538) (19,880) (34,418) (1,108) 8,007 \$6,899	(13,897) (19,450) (33,347) (9,805) 17,812 \$8,007

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

1 General information

The Partnership

Grand Renewable Wind LP (the Partnership), a limited partnership under the laws of the Province of Ontario, was formed on January 10, 2011 as a joint venture project between Samsung Renewable Energy Inc. (Samsung) and Pattern Grand LP Holdings LP, a subsidiary of Pattern Renewable Holdings Canada ULC (PRHC), each as 49.99% limited partners of the Partnership, and Grand Renewable Wind GP Inc. (the GP), as the 0.02% general partner of the Partnership was created to develop, build and operate a wind power project in Haldimand County with generation capacity totaling approximately 149 megawatts (MW) of power (the Project).

On February 24, 2013, Samsung transferred its LP interest in the Partnership to SRE GRW LP Holdings LP, an affiliate of Samsung.

On December 20, 2013, in a series of transactions: (i) Pattern Grand GP Holdings Inc., a wholly owned subsidiary of PRHC, transferred all of the general partner interests in Pattern Grand LP Holdings LP to PRHC, causing Pattern Grand LP Holdings LP to be dissolved by operation of law and PRHC to acquire the LP interests in the Partnership that previously were held by Pattern Grand LP Holdings LP, (ii) PRHC transferred its LP interest in the Partnership and its ownership interest in Pattern Grand GP Holdings Inc., which owned PRHC's ownership interest in the GP, to Pattern Canada Operations Holdings ULC, (PCOH), a wholly owned subsidiary of Pattern Energy Group Inc. (Pattern), and (iii) Pattern Grand GP Holdings Inc. was dissolved.

On December 17, 2014, PCOH transferred all of its LP interest in the Partnership to Pattern Canada Finance Company ULC, a wholly owned subsidiary of PCOH.

Six Nations agreements

On May 25, 2012, the Partnership entered into certain agreements with the Six Nations of the Grand River, a band within the meaning of the Indian Act (Canada) through its elected council (the Six Nations), in which the Partnership provides an option for economic participation by way of an annual royalty from the Partnership or the right to purchase a 10% interest in the Partnership.

On June 11, 2013, the Six Nations exercised its option to purchase a 10% LP interest in the Partnership and the Partnership Agreement was amended and restated to reflect such ownership. Affiliates of Samsung and Pattern each maintain a 45% interest in the Partnership. The Six Nations is not involved in the GP.

The Partnership is controlled by its general partner, the GP, also a joint venture controlled by affiliates of Samsung and Pattern. The Partnership's ownership interests were distributed as follows:

	December 31,	
	2018	2017
SRE GRW LP Holdings LP	44.99%	44.99%
Pattern Canada Finance Company ULC	44.99	44.99
Six Nations of the Grand River	10.00	10.00
Grand Renewable Wind GP Inc.	0.02	0.02
Total	100.00%	100.00%

The Project

The Project is a 149 MW wind project consisting of 67 Siemens wind turbine generators located in Haldimand County, Ontario. On December 9, 2014 the Project achieved the Commercial Operation Date ("COD") and commenced commercial operations.

The Partnership has a power purchase agreement ("PPA") with the Independent Electricity System Operator ("IESO") for a period of 20 years from the COD. The IESO oversees the wholesale electricity market, where the price of energy is determined. It also administers the rules that govern the market and, through an arm's-length market monitoring function, ensures that it is operated fairly and efficiently. The IESO is an agent among the market participants in

Ontario and is neither exposed to, nor

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

benefits from, any transactions. In such capacity, the IESO executes agreements to help the market meet the renewable energy mandates of the government of the Province of Ontario. There are approximately 70 electric distribution companies in Ontario, all of which have government mandates to purchase renewable energy. The PPA provides for guaranteed pricing from IESO that removes volatility caused by fluctuations in market rates. The Ontario government established the Global Adjustment ("GA") which is designed to adjust consumer rates depending on the price of energy. The IESO establishes a monthly variable GA rate based on GA costs and Ontario electricity demand which effectively establishes a pass through mechanism to the consumer and eliminates the IESO's economic exposure to our contract price.

A 100 MW solar facility developed by an affiliate of Samsung is sharing the usage and ownership of the transmission line and substation. The Project connected to the Ontario transmission grid by way of a 20 km transmission line sited in the municipal road allowance.

2 Summary of significant accounting policies

results could differ from those estimates.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to the periods presented, unless otherwise stated. Basis of preparation

The accompanying financial statements are presented using accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of U.S. GAAP financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Because the use of estimates is inherent in the financial reporting process, actual

In recording transactions and balances resulting from business operations, the Partnership uses estimates based on the best information available. Estimates are used for such items as accrued revenue, asset retirement obligation, valuation of long-term derivative contracts and contingencies.

These financial statements do not include assets, liabilities, revenue and expenses of the GP and limited partners. The financial statements of the Partnership reflect no provision or liability for income taxes because profits and losses of the Partnership are allocated to the partners and are included in the income tax returns of the partners. Income and losses for tax purposes may differ from the financial statement amounts and the partners' equity reflected in the financial statements does not necessarily reflect their tax basis.

Functional and presentation currency

Items included in the financial statements of the Partnership are measured using the currency of the primary economic environment in which the Partnership operates (the functional currency). The financial statements are presented in Canadian dollars, which is the Partnership's functional and presentation currency.

Fair value of financial instruments

ASC 820, Fair Value Measurements, defines fair value as the price at which an asset could be exchanged or a liability transferred in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or derived from such prices. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with banks and other short-term highly liquid investments with original maturities of three months or less.

Restricted cash

Restricted cash mainly consists of cash reserves required under the Partnership's loan agreements (note 3). Reconciliation of cash and cash Equivalents and restricted cash as presented on the statements of cash flows

	December 31		
	2018	2017	2016
Beginning			
Cash and cash equivalents at beginning of period	\$2,563	\$3,673	\$5,371
Restricted cash - current	4,336	4,334	3,455
Restricted cash	_	_	8,986
Cash, cash equivalents and restricted cash	\$6,899	\$8,007	\$17,812
Ending			
Cash and cash equivalents at end of period	\$5,079	\$2,563	\$3,673
Restricted cash - current	4,339	4,336	4,334
Restricted cash	_	_	_
Cash, cash equivalents and restricted cash	\$9,418	\$6,899	\$8,007
Net change in cash, cash equivalents and restricted cash	\$2,519	\$(1,108)	\$(9,805)

Trade receivables

The Partnership's trade receivables are generated by selling energy in Ontario, Canada through the IESO as a settlement agent. The allowance for doubtful accounts, if needed, is computed based upon management's estimates of uncollectible accounts. As of December 31, 2018 and 2017, the Partnership has no outstanding trade receivables. Accrued revenue

Accrued revenue represents revenues recognized on contracts for which billings have not been presented to customers as of the balance sheet date. These amounts are billed and generally collected within two months.

Concentration of credit risk

Financial instruments that potentially subject the Partnership to concentrations of credit risk consist primarily of cash and cash equivalents and restricted cash. The Partnership places its cash and cash equivalents and restricted cash with creditworthy institutions located in Canada, which the management believes to have minimal risk. At times, such balances may be in excess of the Canada Deposit Insurance Corporation (CDIC) insurance coverage limit. CDIC insurance currently covers up to \$100 per depositor at each insured bank.

The Partnership's derivative agreements expose the Partnership to losses under certain circumstances, such as the counterparty defaulting on its obligations under the swap agreements or if the swap agreements provide an imperfect hedge. Counterparties to the Partnership's derivative contracts are major financial institutions that have been accorded investment grade ratings.

Property, plant and equipment

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

Property, plant and equipment are stated at historical cost, less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying value or recognized as separate assets, as appropriate, only when it is probable that the future economic benefits associated with the item will flow to the Partnership and the cost of the item can be reliably measured. The asset retirement obligation included in property, plant and equipment is stated at the present value of future cash flows of asset retirement obligation at the time of COD.

Depreciation on property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives. The power plant is depreciated over 25 years and the remaining assets are depreciated over 5 years. The assets' residual values and useful lives are reviewed and adjusted, if appropriate, at the end of each reporting period. Repair and maintenance costs are expensed as incurred. Intangible assets

Amortization is calculated using the straight-line method and recorded against revenue over the remaining term of the PPA.

Impairment of long-lived assets

The Partnership periodically evaluates whether events have occurred that would require revision of the remaining useful life of equipment and improvements and purchased intangible assets, or render them not recoverable. If such circumstances arise, the Partnership uses an estimate of the undiscounted value of expected future operating cash flows to determine whether the long-lived assets are impaired. If the aggregate undiscounted cash flows are less than the carrying amount of the assets, the resulting impairment charge to be recorded is calculated based on the excess of the carrying value of the assets over the fair value of such assets, with the fair value determined based on an estimate of discounted future cash flows. Through December 31, 2018, no impairment charges were recorded.

Deferred financing costs

Financing costs incurred in connection with obtaining construction and term financing, which include direct financing, legal and other upfront costs of borrowing, are capitalized and recorded as a reduction to long-term debt and amortized over the lives of the respective loans using the effective-interest method. Amortization of deferred financing costs is capitalized during construction or expensed following COD.

Derivatives

The Partnership recognizes its derivative instruments as either assets or liabilities in the balance sheets at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it qualifies and has been designated as part of a hedging relationship and the type of hedging relationship. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that are attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income (OCI) or loss (OCL). Changes in the fair value of these derivatives are subsequently reclassified into earnings in the period that the hedged transaction affects earnings. The ineffective portion of changes in fair value is recorded as a component of net income in the statements of operations and comprehensive income.

For undesignated derivative instruments, their change in fair value is reported as a component of net income in the statements of operations and comprehensive income.

The Partnership enters into derivative transactions for the purpose of managing exposure to fluctuations in interest rates, such as interest rate swaps. Interest rate swaps are instruments used to fix the interest rate on variable interest rate debt.

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

Accounts payable and other accrued liabilities

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Payables with payment terms extended beyond one year from the balance sheet dates are presented as non-current liabilities.

Contingent liabilities

Contingent liabilities are recognized when: the Partnership has a present legal obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reasonably estimated.

Asset retirement obligation

The Partnership records an asset retirement obligation for the estimated costs of decommissioning turbines, removing above-ground installations and restoring sites, at the time when a contractual decommissioning obligation materializes. The Partnership records accretion expense, which represents the increase in the asset retirement obligation, over the remaining life of the associated wind project. Accretion expense is recorded as cost of revenue in the statements of operations and comprehensive income using accretion rates based on a credit adjusted risk free interest rate of 6.51%.

Revenue recognition

Revenue is recognized based upon the amount of electricity delivered or curtailed at rates specified under the contracts, assuming all other revenue recognition criteria are met. When curtailment revenue is earned, it is recorded as compensation for forgone revenue. The Partnership evaluates its PPA to determine whether it is in substance a lease or derivative and, if applicable, recognizes revenue pursuant to ASC 840 Leases and ASC 815 Derivatives and Hedging, respectively. As of December 31, 2018, the PPA was not considered a lease or a derivative instrument, as multiple market participants purchase the energy at market-based prices with IESO working as a settlement agent. As a result, revenue (including any revenue from the price guaranteed by IESO), is recognized on an accrual basis. The Partnership recognizes revenue for warranty settlements and liquidated damages from a turbine manufacturer in other revenue upon resolution of outstanding contingencies. Any cash receipts for amounts subject to future adjustment or repayment are deferred in other liabilities until the final settlement amount is considered fixed and determinable.

Cost of revenue

The Partnership's cost of revenue is comprised of direct costs of operating and maintaining its project facilities, including labor, turbine service arrangements, metering service and shadow settlement, environmental fee, land lease royalties, property tax, insurance, depreciation, amortization and accretion.

Comprehensive income

Comprehensive income consists of net income and other comprehensive income. Other comprehensive income is included in accumulated other comprehensive income in the accompanying statements of changes in partners' equity. Recently adopted accounting standard

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. As a result, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments do not provide a definition of restricted cash or restricted cash equivalents. The Company elected to early adopt the provisions of ASU 2016-18 as of December 31, 2018 and has restated its statements of cash flows for the years ended December 31, 2017 and 2016 to reflect

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

amounts described as restricted cash and restricted cash equivalents included with cash and cash equivalents in the reconciliation of beginning of period and end of period total amounts shown on the statements of cash flows. Consequently, transfers between cash and restricted cash will not be presented as a separate line item in the operating, investing or financing sections of the cash flow statement. A reconciliation of cash and cash equivalents and restricted cash as presented on the balance sheets to the statements of cash flows is included in the significant accounting policies above.

Recent accounting pronouncements

In August 2018, the FASB issued ASU 2018-13, Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13), which amends changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty which should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. ASU 2018-13 is effective for annual periods beginning after December 15, 2019, including interim periods within those periods. Early application is permitted. The Partnership is currently assessing the impact of changes to the disclosure requirements for fair value measurement.

In February 2017, the FASB issued ASU 2017-05, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASU 2017-05). ASU 2017-05 is meant to clarify the scope of ASC Subtopic 610-20, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets and to add guidance for partial sales of nonfinancial assets. ASU 2017-05 is to be applied using a full retrospective method or a modified retrospective method as outlined in the guidance and is effective at the same time as ASU 2014-09. Further, the Partnership is required to adopt this guidance at the same time that it adopts the guidance in ASU 2014-09 which creates ASC Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09). The Partnership has assessed the future impact of this guidance on its financial statements and related disclosures and expects to adopt these updates beginning January 1, 2019. The adoption of ASU 2017-05 is not expected to have a material impact on its financial statements and related disclosures. In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts, ASU 2016-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The adoption of ASU 2016-13 is not expected to have a material impact on its financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (ASU 2016-02), which requires lessees to recognize right-of-use assets and lease liabilities, for all leases, with the exception of short-term leases, at the commencement date of each lease. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 simplifies the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and liabilities. ASU 2016-02 is effective for annual periods beginning after December 15, 2019 for non-public entities. Early adoption is permitted. The amendments of this update should be applied using a modified retrospective approach, which requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented. The Partnership is currently in the initial stages of evaluating the impact of the new standard on its accounting policies, processes and system requirements. The Partnership is also assessing the future accounting impact of this update on its financial statements and related disclosures as it applies to its PPA, land lease arrangements and other lease arrangements. As the Partnership progresses further in its analysis, the scope of this assessment could be expanded to review other types of contracts.

In May 2014, the FASB issued ASU 2014-09, which creates FASB Accounting Standards Codification (ASC) Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09).

The new standard replaces industry-specific guidance and establishes a single five-step model to identify and recognize revenue. The core principle of the new standard is that an entity should recognize revenue upon transfer of control of promised goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. Additionally, the new standard requires the entity to disclose further quantitative and qualitative information regarding the nature and amount of revenues arising from contracts with customers, as well as other information about the significant judgments and estimates used in recognizing revenues from contracts with customers. The partnership expects to adopt these

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

updates beginning January 1, 2019. The adoption of ASC 606 has been assessed and determined that there will not be a material impact on the financial statements.

In October 2018, the FASB issued ASU 2018-16, Derivatives and Hedging (Topic ASC 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes (ASU 2018-16), which expands the list of U.S. benchmark interest rates permitted in the application of hedge accounting. Because of concerns about the sustainability of LIBOR, the Federal Reserve Board and the Federal Reserve Bank of New York (Fed) initiated an effort to introduce an alternative reference rate in the United States. The SOFR is calculated by the Fed based on the interest rates banks charge one another in the overnight market, typically called repurchase agreements, and because it is based on transactions in the open market, it is more reflective of market conditions than LIBOR, which relies on judgment. The provisions of ASU 2017-12 (discussed below) and ASU 2018-16 are effective for fiscal years beginning after December 15, 2019, with early adoption permitted. Initial adoption of ASU 2017-12 is required to be reported using a modified retrospective approach, with the exception of the presentation and disclosure requirements which are required to be applied prospectively. The Partnership is currently in the process of determining the impact of adoption of the provisions of ASU 2017-12 and ASU 2018-16.

In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12), which amends the presentation and disclosure requirements and changes how companies assess effectiveness. The amendments are intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting, and increase transparency as to the scope and results of hedging programs. ASU 2017-12 is effective for annual periods beginning after December 15, 2019. ASU 2017-12 requires a modified retrospective transition method in which the Partnership will recognize the cumulative effect of the change on the opening balance of each affected component of equity in the balance sheet as of the date of adoption. While the Partnership continues to assess all potential impacts of the standard, the adoption is not expected to have a material impact on its future consolidated financial statements.

3 Restricted cash

The following table presents the components of restricted cash:

December 31, 2018 2017

Completion reserve account \$4,339 \$4,336

Subtotal 4,339 4,336

Less: Current portion (4,339) (4,336)

Restricted cash, non-current \$— \$—

The amount in the completion reserve account is reserved to pay outstanding project costs specified during term conversion (note 6). Upon full payment of outstanding project costs, the remaining balance will be released from restricted cash.

4Property, plant and equipment

The following is a summary of property, plant and equipment, at cost less accumulated depreciation, at:

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

December 31, 2018 2017 Power plant \$430,421 \$430,421 Furniture, fixtures and equipment 281 281 Asset retirement obligation - asset 2,463 2,463 Capital spares 124 240 Subtotal 433,405 433,289 Less: Accumulated depreciation (70,792) (53,439)\$362,613 \$379,850

Depreciation expense of \$17,353, \$17,379 and \$17,373 was charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively. 5 Intangible assets

December 31, 2018 2017

Beginning net book value \$1,414 \$1,498

Amortization expense (83) (84)

Closing net book value \$1,331 \$1,414

December 31, 2018 2017 Cost \$1,672 \$1,672 Accumulated amortization (341) (258) Net book value \$1,331 \$1,414

Amortization expense of \$83, \$84, and \$83 was charged as a reduction to revenue in the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

6Long-term debt

Upon achievement of the COD in December 2014, the construction facility converted to term loan on July 29, 2015. The loan matures on July 29, 2022. In connection with the financing agreement, the Partnership entered into interest rate swaps on 90% of the loan commitment.

Collateral under the financing agreement consists of substantially all of the Partnership's assets. The loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict the Partnership's ability to incur debt, grant liens, sell or lease assets, transfer equity interest, dissolve, pay distributions and change its business. The Partnership is in compliance with all loan covenants. All of the limited and general partners and shareholders of general partners pledged shares of partnership units or common stock owned as collateral for the loan.

Terms and conditions of outstanding borrowings were as follows:

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

As of December 31, 2017

Deferred Net of

Interest Maturity date Principal financing financing

costs costs

Term loan \$354,774 \$(5,643) \$349,131 3.80 % July 2022

Less: Current portion (17,371) 1,356 (16,015)\$337,403 \$(4,287) \$333,116 Net of current

Future maturities of long-term debt are as follows as of December 31, 2018:

2019 \$18,418 2020 19,525 19,680 2021 17,901 2022 19,247 2023 Thereafter 242,632 \$337,403

The following table presents a reconciliation of interest expense presented in the Partnerships' statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016:

2018 2017 2016 \$19.038 \$19.666 \$20.400 Interest incurred Amortization of deferred financing costs 1,356 1,413 1.248 Interest expense \$20,394 \$21,079 \$21,648

Letters of credit facilities

On July 29, 2015, letters of credit of \$24,000, \$8,000 and \$5,000 were issued upon term conversion for a debt service reserve, operations and maintenance reserve, and decommissioning reserve, respectively, with a seven-year term. Funds, when and if drawn on the facility, accrue interest at 1.25% plus Prime Rate, and at the partners' option, the rate can be converted to a rate of CDOR plus 2.25% per annum. In addition, the Partnership shall pay letter of credit fees on the basis of the undrawn amount of the facility at 2.25% per annum. As of December 31, 2018, the letters of credit facility did not have an outstanding balance, and no amounts were drawn in 2018. Letter of credit fees of \$832 and \$832 were charged to other expense in the statements of operations and comprehensive income for the year ended December 31, 2018 and 2017, respectively.

7 Asset retirement obligation

The Partnership's asset retirement obligation represents the estimated cost of decommissioning the turbines, removing above-ground installations and restoring the sites at the end of its estimated useful life.

The following table presents a reconciliation of the beginning and ending aggregate carrying amount of the asset retirement obligation:

December 31, 2018 2017 Asset retirement obligation - Beginning of year \$2,992 \$2,809 Accretion expense 195 183 Asset retirement obligation - End of year \$3,187 \$2,992

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

8 Derivatives

The Partnership uses interest rate derivatives to manage its exposure to fluctuations in interest rates. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon movement in market prices. The Partnership's objectives for holding these derivative instruments include reducing, eliminating and efficiently managing the economic impact of interest rate exposures as effectively as possible. The Partnership does not hedge all of its interest rate risks, thereby exposing the unhedged portions to changes in market prices.

The following tables present the fair values of the Partnership's derivative instruments on a gross basis as reflected on the Partnership's balance sheets:

December 31, 2018 December 31,

2017

Derivative Derivative liabilities liabilities

Current Long-term Current Long-term

Fair value of designated derivatives:

Interest rate swaps \$3,3465\$ 5,366 \$4,811 \$7,601

Fair value of undesignated derivatives:

Interest rate swaps \$ 30,141 \$ 28,155 \$-Total fair value \$3,346 \$35,507 \$4,811 \$35,756

The following table summarizes the notional amounts of the Partnership's outstanding derivative instruments:

December 31

Unit of measure 2018 2017

Designated derivative instruments

Interest rate swaps \$306,364 \$321,998 CAD

The following table presents losses on derivative contracts designated and qualifying as cash flow hedges recognized in accumulated other comprehensive loss, as well as, losses on other derivative contracts and amounts reclassified to earning for the following periods:

		December	31	
	Description	2018	2017	2016
Income recognized in accumulated OCL	Effective portion	\$3,701	\$13,689	\$7,756
Losses recognized in earnings on other derivative contracts	Effective portion	\$(1,986)	\$(230)\$(7,253)
Losses reclassified from accumulated OCL into interest expense	Derivative settlements	\$(5,121)	\$(7,568)	(8,582)
No ineffectiveness was recorded on these swaps for the years en	ded December 31, 2018	and 2017.	The Partn	ership
estimates that \$3,250 in accumulated other comprehensive loss v	will be reclassified into	earnings ov	er the nex	t twelve
months				

9Fair value measurement

The Partnership's fair value measurements incorporate various factors, including the credit standing and performance risk of the counterparties, the applicable exit market, and specific risks inherent in the instrument. Non-performance and credit risk adjustments on risk management instruments are based on current market inputs when available, such as credit default swap spreads. When such information is not available, internal models are used.

Assets and liabilities recorded at fair value in the financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to valuation of these assets or liabilities are as follows:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

Level 2 - Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Short-term financial instruments consist principally of cash and cash equivalents, restricted cash, and accounts payable and other accrued liabilities. Based on the nature and short maturity of these instruments their fair value is approximated using carrying cost and they are presented in the financial statements at carrying cost.

Long-term debt is presented on the balance sheets at amortized cost. The fair value of variable interest rate for long-term debt is approximated by its carrying cost.

Derivatives are presented in the financial statements at fair value. The interest rate swaps were valued by discounting the net cash flows using the forward CDOR curve with the valuations adjusted by the Project's credit default swap rate. The Partnership's financial assets (liabilities) which require fair value measurement on a recurring basis are classified within the fair value hierarchy as follows:

1)Commitments

Land Lease Agreements

The Partnership has entered into various long-term land lease agreements. The annual fees range from minimum rent payments varying by lease to maximum rent payments of a certain percentage of energy delivered revenues, varying by lease.

Lease payments, including amortization of the lease option, of \$1,889 \$1,719 and \$1,936 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017, and 2016, respectively.

The future payments related to these leases as of December 31, 2018 are as follows:

2019	\$1,878
2020	1,915
2021	1,953
2022	1,992
2023	2,031
Thereafter	27,784
Total	\$37,553

Service and Maintenance Agreement

The Partnership has entered into service and maintenance agreements with Siemens to provide and carry out turbine maintenance and service activities for the Project until January 2021. Based on the terms of the agreements, Siemens shall be entitled to receive

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

a daily base fee per turbine that may be subject to periodic price adjustments for inflation, over the terms of the agreements. As of December 31, 2018, outstanding commitments with Siemens were \$2,784, including an estimated annual price adjustment for inflation of 2%, where applicable, payable over the full term of the agreement. Contingencies

Community Vibrancy Fund

On September 26, 2011, the Partnership entered into a Community Vibrancy Fund (CVF) Agreement with the Corporation of Haldimand County, in which the Partnership will make annual payments into a fund managed by the municipality in amounts of \$3.5 per MW of the Project installed capacity plus \$5 per kilometer (km) of high voltage overhead transmission line that is installed in municipal right-of-way. The payments are calculated annually and are owed for the 20-year term of the PPA. In exchange for CVF payments, the municipality undertakes certain obligations to support the Project, including entering into a road use agreement in which the Project may utilize municipal right-of-ways for collection and transmission lines.

Turbine Availability Warranty

The Partnership has a turbine availability warranty from its turbine manufacturer. Pursuant to the warranty, if a turbine operates at less than minimum availability during the warranty period, the turbine manufacturer is obligated to pay, as liquidated damages, an amount for each percent that the turbine operates below the minimum availability threshold. In addition, if a turbine operates at more than a specified availability during the warranty period, the Partnership has an obligation to pay a bonus to the turbine manufacturer. As of December 31, 2018, the Partnership recorded a liability of \$31 associated with bonuses payable to the turbine manufacturer.

11 Related party transactions

The Partnership is controlled by the GP, which is jointly controlled by Samsung and Pattern in accordance with the terms of the Shareholder Agreement. Certain terms of the Samsung and Pattern Joint Venture Wind Development Agreement, entered into between Samsung and an affiliate of PRHC on July 27, 2010, directed the responsibilities of Samsung and PRHC for the Project.

The following transactions were carried out with related parties:

a) Management, Operation, and Maintenance Agreement (MOMA)

Balance of Plant MOMA

On September 13, 2013, the Partnership entered into a MOMA with Pattern Operators Canada ULC, which is owned by PCOH to operate and manage the maintenance of the wind plant and to perform certain other services pertaining to the wind plant in accordance with terms and conditions set in the MOMA.

The amounts of \$1,248, \$1,225 and \$1,206 were invoiced to the Partnership for the years ended December 31, 2018, 2017 and 2016, respectively, which were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

Transmission Line MOMA (TL MOMA)

On September 13, 2013, the Partnership and Grand Renewable Solar LP entered into TL MOMA with Pattern Operators Canada ULC, which is 100% owned by an affiliate of Pattern, to operate and manage the maintenance of the transmission line and common assets of the substation and to perform certain other services pertaining to the wind plant in accordance with terms and conditions set in TL MOMA.

The amounts of \$53, \$52 and \$52 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

Grand Renewable Wind LP Notes to Financial Statements December 31, 2018 (not covered by the auditor's report), 2017 and 2016 (In thousands of Canadian Dollars)

In addition, the amounts of \$96, \$90 and \$100 were charged to the statements of operations and comprehensive income as reimbursement of certain costs for the years ended December 31, 2018, 2017 and 2016, respectively. b) Project Administration Agreement (PAA)

On September 13, 2013, the Partnership entered into PAA with SRE Wind PA LP (PA), which is 100% owned by Samsung to receive project administrative services.

\$426, \$419 and \$412 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and 2016, respectively.

c) Transmission Facilities Co-ownership Agreement (TFCA)

On March 8, 2013, the Partnership entered into the TFCA with a planned 100 MW solar project developed by an affiliate of Samsung which provides for the co-ownership of the transmission line and substation of the Project. Under the co-ownership agreement, the Project and the solar project each contributed 50% of the construction and operating costs of the transmission line and substation and each received a 50% undivided interest in such shared facilities.

d) The Partnership recorded the following balances with related parties:

	2018	2017
Related party payable to Pattern Operators Canada ULC	\$123	\$276
Related party payable to SRE Wind PA LP	40	79
	\$163	\$355

12 Subsequent events

The Partnership paid distributions to partners in the amount of \$3,790 on February 14, 2019.

SP Armow Wind Ontario LP Financial Statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP)

December 31, 2018 (In thousands of Canadian Dollars)

SP Armow Wind Ontario LP

Page
<u>S-42</u>
<u>S-43</u>
<u>S-44</u>
<u>S-45</u>
<u>S-46</u>
<u>S-47</u>

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Partners of SP Armow Wind Ontario LP Opinion on the Financial Statements

We have audited the accompanying balance sheet of SP Armow Wind Ontario LP (the Partnership) as of December 31, 2017, and the related statements of operations and comprehensive income, statements of changes in partners' equity, and statements of cash flows for the years ended December 31, 2017 and 2016, including the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Partnership as of December 31, 2017, and its results of operations and its cash flows for the years ended December 31, 2017 and 2016 in conformity with accounting principles generally accepted in the United States of America (US GAAP).

Basis for Opinion

These financial statements are the responsibility of the Partnership's management. Our responsibility is to express an opinion on the Partnership's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Partnership in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Change in accounting principle

As discussed in Note 2 to the financial statements, the Partnership changed the manner in which it accounts for restricted cash in the statements of cash flows in 2018, 2017 and 2016.

Other matters

The accompanying balance sheet of the Partnership as of December 31, 2018, and the related statements of operations and comprehensive income, statement of changes in partners' equity and statement of cash flows for the year ended December 31, 2018 are presented for purposes of complying with Rule 3-09 of SEC Regulation S-X; however, Rule 3-09 does not require the 2018 financial statements to be audited and they are therefore not covered by this report.

/s/ PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Canada

February 20, 2018, except for the change in the manner in which the Partnership accounts for restricted cash in the statements of cash flows discussed in Note 2 to the financial statements, as to which the date is February 15, 2019 We have served as the Partnership's auditor since 2011.

SP Armow Wind Ontario LP Balance Sheet As of December 31, 2018* and 2017

(In thousands of Canadian Dollars)	2010*	2017
ASSETS	2018*	2017
Current assets:		
Cash and cash equivalents	\$13,158	\$10,685
Restricted cash (note 3)	3,172	10
Accrued revenue (note 2)	10,406	12,935
Other current assets	1,357	1,406
Total current assets	28,093	25,036
Restricted cash (note 3)	_	3,172
Property, plant and equipment - net of accumulated depreciation	470 802	
of \$67,529 and \$45,627 in 2018 and 2017, respectively (note 4)	479,802	501,405
Other assets	820	872
Total assets	\$508,715	\$530,485
LIABILITIES & EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities	\$2,589	\$2,440
Accounts payable and other accrued liabilities - related parties (note 10)	172	183
Current portion of long-term debt, net of financing costs of \$1,284 and \$1,338 in 2018 and 2017, respectively (notes 2 and 5)	22,068	18,972
Contingent liabilities (note 9)	605	579
Derivative liabilities, current (note 7)	1,761	3,703
Other current liabilities	1,899	1,938
Total current liabilities	29,094	27,815
Long-term debt, net of financing costs of \$3,858 and \$5,142 in 2018 and 2017, respectively	462,613	484,681
(notes 2 and 5) Derivative lightities (note 7)	22,476	22,338
Derivative liabilities (note 7) Asset retirement obligation (note 6)	5,537	5,274
Total liabilities	519,720	540,108
Commitments and contingencies (note 9)	,	,
Equity:	(82,900)	(40.940.)
Partners' capital Accumulated net income	96,132	(49,840) 66,258
Accumulated other comprehensive loss	(24,237)	(26,041)
Total partners' equity	(24,237) $(11,005)$	
Total liabilities and equity	\$508,715	\$530,485
*Not covered by the auditor's report	4200,710	7220,100
See accompanying notes to financial statements.		

SP Armow Wind Ontario LP Statement of Operations and Comprehensive Income For the years ended December 31, 2018*, 2017 and period October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)			
	2018*	2017	2016
Revenue (note 2):			
Energy delivered		\$55,718	\$16,498
Compensation for forgone energy	21,968	34,284	6,473
Other revenue	1,183	1,014	300
Total revenue	88,076	91,016	23,271
Cost of revenue:			
Project expenses	10,229	9,633	2,040
Project expenses - related parties (note 10)	1,403	1,377	277
Depreciation, amortization and accretion	22,165	22,153	4,544
Total cost of revenue	33,797	33,163	6,861
Gross profit	54,279	57,853	16,410
Operating expanses			
Operating expenses: General and administrative	1,043	1,147	237
General and administrative - related parties (note 10)	420	413	83
Total operating expenses	1,463	1,560	320
Operating income	52,816	56,293	16,090
	- ,	,	-,
Other expense:			
Interest expense (note 5)	(22,440)	(22,838)	(4,898)
Other expense, net	(502)	(631)	(148)
Total other expense		(23,469)	
Net income	29,874	32,824	11,044
Other comprehensive income (loss):			
Derivative activity (notes 7 and 8):			
Effective portion of change in fair value of derivatives			
Effective portion of change in ran value of defivatives	(2,359)	9,191	17,064
Reclassifications to net income	4,163	7,680	2,154
Total change in effective portion of change in fair market value of derivatives	1,804	16,871	19,218
Comprehensive income	\$31,678	\$49,695	\$30,262
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^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

SP Armow Wind Ontario LP Statement of Changes in Partners' Equity For the years ended December 31, 2018*, 2017 and period October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

	Partners' capital	Accumulated net income	Accumulated other comprehensive loss	Total
Balance at October 18, 2016	\$25,020	\$22,390	\$(62,130)	\$(14,720)
Other comprehensive income		_	19,218	19,218
Net income		11,044		11,044
Cash distribution	(11,453)	_		(11,453)
Balance at December 31, 2016	\$13,567	\$33,434	\$(42,912)	\$4,089
Other comprehensive income		_	16,871	16,871
Net income		32,824		32,824
Cash distribution	(63,407)	_		(63,407)
Balance at December 31, 2017	\$(49,840)	\$66,258	\$(26,041)	\$(9,623)
Other comprehensive income		_	1,804	1,804
Net income		29,874	_	29,874
Cash distribution	(33,060)		_	(33,060)
Balance at December 31, 2018*	\$(82,900)	\$96,132	\$(24,237)	\$(11,005)

^{*}Not covered by the auditor's report

See accompanying notes to financial statements.

SP Armow Wind Ontario LP Statement of Cash Flows
For the year ended December 31, 2018*, 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)			
	2018*	2017 Restated	2016 Restated
Cash flows from operating activities:			
Net income	\$29,874	\$32,824	\$11,044
Adjustment to reconcile net income to net cash provided by operating activities: Depreciation, amortization and accretion	22,165	22,153	4,544
Amortization of deferred financing costs	1,338	1,381	285
Changes in assets and liabilities, net:	,	,	
Accrued revenue	2,529	181	(2,654)
Accounts payable and other accrued liabilities	256	(487)	424
Other, net	62 56 224	81 56,133	(4,869)
Net cash provided by operating activities	56,224	30,133	8,774
Cash flows from investing activities:			
Capital expenditures	(298)	(441)	(326)
Net changes in sales taxes recoverable and accounts payable and other accrued	(93)	(773)	(851)
liabilities related to investing activities	, ,	. ,	
Net cash used in investing activities	(391) (1,214) (1177)
Cash flows from financing activities:			
Repayment of long-term debt	(20,310)	(7,401)	
Distribution to partners	(33,060)		(11,453)
Net cash used in financing activities	(53,370)	(70,808)	(11,453)
	2.462	(15,000)	(2.056)
Net change in cash and cash equivalents Cash, cash equivalents and restricted cash - Beginning	2,463 13,867	(15,889) 29,756	(3,856) 33,612
Cash, cash equivalents and restricted cash - Ending	\$16,330	\$13,867	\$29,756
Cush, cush equivalents and restricted cush. Enamg	Ψ10,550	Ψ13,007	Ψ27,730
Supplemental non-cash activities disclosure:			
Effective portion of change in fair value of derivatives	\$2,359	\$(9,191)\$—
Schedule cash activities disclosure: Cash payments for interest	\$21,141	\$21,478	\$7,482
*Not covered by the auditor's report	\$21,141	\$21,470	\$ 1,402
See accompanying notes to financial statements.			
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SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

1 General information

The Partnership

SP Armow Wind Ontario LP (the Partnership), a limited partnership under the laws of the Province of Ontario, was formed on August 29, 2011 as a joint venture project between Samsung Renewable Energy Inc. (Samsung) and Pattern Armow LP Holdings LP, a subsidiary of Pattern Renewable Holdings Canada ULC (PRHC), each as 49.99% limited partners of the Partnership, and SP Armow Wind Ontario GP Inc. (the GP), as the 0.02% general partner of the Partnership. The Partnership was created to develop, build and operate a wind power project in Kincardine, Bruce County with generation capacity totaling approximately 180 megawatts (MW) of power (the Project). On August 6, 2014, Samsung transferred all of its LP interest in the Partnership to SRE Armow LP Holdings LP, an affiliate of Samsung.

On October 17, 2016, Pattern Armow LP Holdings LP transferred all of its LP interest in the Partnership to Pattern Canada Finance Company ULC, a wholly owned subsidiary of Pattern Energy Group Inc. (Pattern).

The Partnership is controlled by its general partner, the GP, also a joint venture controlled by affiliates of Samsung and Pattern. As of December 31, 2018 and 2017, the Partnership's ownership interests were distributed as follows:

	2018		2010	
SRE Armow LP Holdings LP	49.99	%	49.99	%
Pattern Canada Finance Company ULC	49.99	%	49.99	%
SP Armow Wind Ontario GP Inc.	0.02	%	0.02	%
	100.00	0%	100.00	0%

The Project

The Project is a 179 MW wind project consisting of 91 Siemens wind turbine generators located in Haldimand County, Ontario. On December 7, 2015 the Project achieved the Commercial Operation Date ("COD") and commenced commercial operations.

The Partnership has a power purchase agreement ("PPA") with the Independent Electricity System Operator ("IESO") for a period of 20 years from the COD. The IESO oversees the wholesale electricity market, where the price of energy is determined. It also administers the rules that govern the market and, through an arm's-length market monitoring function, ensures that it is operated fairly and efficiently. The IESO is an agent among the market participants in Ontario and is neither exposed to, nor benefits from, any transactions. In such capacity, the IESO executes agreements to help the market meet the renewable energy mandates of the government of the Province of Ontario. There are approximately 70 electric distribution companies in Ontario, all of which have government mandates to purchase renewable energy. The PPA provides for guaranteed pricing from IESO that removes volatility caused by fluctuations in market rates. The Ontario government established the Global Adjustment ("GA") which is designed to adjust consumer rates depending on the price of energy. The IESO establishes a monthly variable GA rate based on GA costs and Ontario electricity demand which effectively establishes a pass through mechanism to the consumer and eliminates the IESO's economic exposure to our contract price.

2Summary of significant accounting policies

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to the period presented, unless otherwise stated.

SP Armow Wind Ontario LP
Notes to Financial Statements
For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016
(In thousands of Canadian Dollars)

Basis of presentation

In accordance with Rule 3-09 of Regulation S-X, full financial statements of significant equity investments are required to be presented in the annual report of the investor. For purposes of S-X 3-09, the investee's separate annual financial statements should only depict the period of the fiscal year in which it was accounted for by the equity method by the investor. On Oct 17, 2016, Pattern purchased its interest in the partnership. Accordingly, comparatives financial statements have been prepared for the period from October 18, 2016 to December 31, 2016 (stub period). Basis of preparation

The accompanying financial statements are presented using accounting principles generally accepted in the United States of America (U.S. GAAP). The preparation of U.S. GAAP financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Because the use of estimates is inherent in the financial reporting process, actual results could differ from those estimates.

In recording transactions and balances resulting from business operations, the Partnership uses estimates based on the best information available. Estimates are used for such items as accrued revenue, asset retirement obligation, valuation of derivative contracts and contingencies.

These financial statements do not include assets, liabilities, revenue and expenses of the GP and limited partners. The financial statements of the Partnership reflect no provision or liability for income taxes because profits and losses of the Partnership are allocated to the partners and are included in the income tax returns of partners. Income and losses for tax purposes may differ from the financial statement amounts and the partners' equity reflected in the financial statements does not necessarily reflect their tax basis.

Functional and presentation currency

Items included in the financial statements of the Partnership are measured using the currency of the primary economic environment in which the Partnership operates (the functional currency). The financial statements are presented in Canadian dollars, which is the Partnership's functional and presentation currency.

Fair value of financial instruments

ASC 820, Fair Value Measurements, defines fair value as the price at which an asset could be exchanged or a liability transferred in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or derived from such prices. Where observable prices or inputs are not available, valuation models are applied.

These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held on call with banks and other short-term highly liquid investments with original maturities of three months or less.

Restricted cash

Restricted cash consists of cash reserves required under the Partnership's loan agreements and security deposits required to collateralize commercial bank letter of credit facilities related primarily to a power purchase agreement (PPA) and road use agreements (note 3).

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

Reconciliation of cash and cash Equivalents and restricted cash as presented on the statements of cash flows

	December 31		
	2018	2017	2016
Beginning			
Cash and cash equivalents at beginning of period	\$10,685	\$21,856	\$2,661
Restricted cash - current	10	814	5,469
Restricted cash	3,172	7,086	15,744
Cash, cash equivalents and restricted cash	\$13,867	\$29,756	\$23,874
Ending			
Cash and cash equivalents at end of period	\$13,158	\$10,685	\$21,856
Restricted cash - current	3,172	10	814
Restricted cash	_	3,172	7,086
Cash, cash equivalents and restricted cash	\$16,330	\$13,867	\$29,756
Net change in cash, cash equivalents and restricted cash	\$2,463	\$(15,889)	\$5,882

Trade receivables

The Partnership's trade receivables are generated by selling energy in Ontario, Canada through the IESO as a settlement agent. The allowance for doubtful accounts, if needed, is computed based upon management's estimates of uncollectible accounts. As of December 31, 2018 and 2017, the Partnership has no outstanding trade receivables.

Accrued revenue

Accrued revenue represents revenues recognized on contracts for which billings have not been presented to customers as of the balance sheet date. These amounts are billed and generally collected within two months.

Concentration of credit risk

Financial instruments that potentially subject the Partnership to concentrations of credit risk consist primarily of cash and cash equivalents and restricted cash. The Partnership places its cash and cash equivalents and restricted cash with creditworthy institutions located in Canada, which management believes to have minimal risk. At times, such balances may be in excess of the Canada Deposit Insurance Corporation (CDIC) insurance coverage limit. CDIC insurance currently covers up to \$100 per depositor at each insured bank.

The Partnership's derivative agreements expose the Partnership to losses under certain circumstances, such as the counterparty defaulting on its obligations under the swap agreements or if the swap agreements provide an imperfect hedge. Counterparties to the Partnership's derivative contracts are major financial institutions that have been accorded investment grade ratings.

Property, plant and equipment

Property, plant and equipment are stated at historical cost, less accumulated depreciation. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying value or recognized as separate assets, as appropriate, only when it is probable that the future economic benefits associated with the item will flow to the Partnership and the cost of the item can be reliably measured. The asset retirement obligation included in property, plant and equipment is stated at the present value of future cash flows of asset retirement obligation at the time of COD.

Depreciation on property, plant and equipment is calculated using the straight-line method to allocate their cost to their residual values over their estimated useful lives. The power plant is depreciated over 25 years and the remaining assets are depreciated over

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

5 years. The assets' residual values and useful lives are reviewed and adjusted, if appropriate, at the end of each reporting period. Repair and maintenance costs are expensed as incurred.

Impairment of long-lived assets

The Partnership periodically evaluates whether events have occurred that would require revision of the remaining useful life of equipment and improvements or render them not recoverable. If such circumstances arise, the Partnership uses an estimate of the undiscounted value of expected future operating cash flows to determine whether the long-lived assets are impaired. If the aggregate undiscounted cash flows are less than the carrying amount of the assets, the resulting impairment charge to be recorded is calculated based on the excess of the carrying value of the assets over the fair value of such assets, with the fair value determined based on an estimate of discounted future cash flows. Through December 31, 2018, no impairment charges were recorded.

Deferred financing costs

Financing costs incurred in connection with obtaining construction and term financing, which include direct financing, legal and other upfront costs of borrowing, are capitalized and recorded as a reduction to long-term debt and amortized over the lives of the respective loans using the effective-interest method. Amortization of deferred financing costs is capitalized during construction or expensed following COD.

Derivatives

The Partnership recognizes its derivative instruments as either assets or liabilities in the balance sheets at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it qualifies and has been designated as part of a hedging relationship and, further, on the type of hedging relationship. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that are attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income or loss (OCI or OCL). Changes in the fair value of these derivatives are subsequently reclassified into earnings in the period the hedged transaction affects earnings. The ineffective portion of changes in fair value is recorded as a component of net income in the statements of operations and comprehensive income.

For undesignated derivative instruments, their change in fair value is reported as a component of net income in the statements of operations and comprehensive income.

The Partnership enters into derivative transactions for the purpose of managing exposure to fluctuations in interest rates, such as interest rate swaps. Interest rate swaps are instruments used to fix the interest rate on variable interest rate debt

Accounts payable and other accrued liabilities

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Payables with payment terms extended beyond one year from the balance sheet dates are presented as non-current liabilities.

Contingent liabilities

Contingent liabilities are recognized when: the Partnership has a present legal obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount can be reasonably estimated.

Asset retirement obligation

The Partnership records an asset retirement obligation for the estimated costs of decommissioning turbines, removing above-ground installations and restoring sites, at the time when a contractual decommissioning obligation materializes. The Partnership records accretion expense, which represents the increase in the asset retirement obligation, over the remaining life of the associated wind project. Accretion expense is recorded as cost of revenue in the statements of operations and comprehensive income using accretion rates based on a credit adjusted risk free

interest rate of 4.989%.

SP Armow Wind Ontario LP
Notes to Financial Statements
For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016
(In thousands of Canadian Dollars)

Revenue recognition

Revenue is recognized based upon the amount of electricity delivered or curtailed at rates specified under the contracts, assuming all other revenue recognition criteria are met. When curtailment revenue is earned it is recorded as compensation for forgone revenue. The Partnership evaluates its PPA to determine whether it is in substance a lease or derivative and, if applicable, recognizes revenue pursuant to ASC 840 Leases and ASC 815 Derivatives and Hedging, respectively. As of December 31, 2018, the PPA was not considered a lease or a derivative instrument, as multiple market participants purchase the energy at market-based prices with IESO working as a settlement agent. As a result, revenue (including any revenue from the price guaranteed by IESO), is recognized on an accrual basis. The Partnership recognizes revenue for warranty settlements and liquidated damages from a turbine manufacturer in other revenue upon resolution of outstanding contingencies. Any cash receipts for amounts subject to future adjustment or repayment are deferred in other liabilities until the final settlement amount is considered fixed and determinable.

Cost of revenue

The Partnership's cost of revenue is comprised of direct costs of operating and maintaining its project facilities, including labor, turbine service arrangements, metering service and shadow settlement, environmental fee, land lease royalties, property tax, insurance, depreciation, amortization and accretion.

Comprehensive income

Comprehensive income consists of net income and other comprehensive loss. Other comprehensive loss is included in accumulated other comprehensive loss in the accompanying statements of changes in partners' equity.

Recently adopted accounting standard

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18), which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. As a result, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments do not provide a definition of restricted cash or restricted cash equivalents. The Company elected to early adopt the provisions of ASU 2016-18 as of December 31, 2018 and has restated its statements of cash flows for the years ended December 31, 2017 and 2016 to reflect amounts described as restricted cash and restricted cash equivalents included with cash and cash equivalents in the reconciliation of beginning of period and end of period total amounts shown on the statements of cash flows. Consequently, transfers between cash and restricted cash will not be presented as a separate line item in the operating, investing or financing sections of the cash flow statement. A reconciliation of cash and cash equivalents and restricted cash as presented on the balance sheets to the statements of cash flows is included in the significant accounting policies above.

Recent accounting pronouncements

In August 2018, the FASB issued ASU 2018-13, Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13), which amends changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty which should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. ASU 2018-13 is effective for annual periods beginning after December 15, 2019, including interim periods within those periods. Early application is permitted. The Partnership is currently assessing the impact of changes to the disclosure requirements for fair value measurement.

In February 2017, the FASB issued ASU 2017-05, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets (ASU 2017-05). ASU 2017-05 is meant to clarify the scope of ASC Subtopic

610-20, Other Income-Gains and Losses from the Derecognition of Nonfinancial Assets and to add guidance for partial sales of nonfinancial assets. ASU 2017-05 is to be applied using a full retrospective method or a modified retrospective method as outlined in the guidance and is effective at the same time as ASU 2014-09. Further, the Partnership is required to adopt this guidance at the same time that it adopts the guidance in ASU

SP Armow Wind Ontario LP
Notes to Financial Statements
For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016
(In thousands of Canadian Dollars)

2014-09 which creates ASC Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09). The Partnership has assessed the future impact of this guidance on its financial statements and related disclosures and expects to adopt these updates beginning January 1, 2019. The adoption of ASU 2017-05 is not expected to have a material impact on its financial statements and related disclosures. In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. ASU 2016-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The adoption of ASU 2016-13 is not expected to have a material impact on its financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (ASU 2016-02), which requires lessees to recognize right-of-use assets and lease liabilities, for all leases, with the exception of short-term leases, at the commencement date of each lease. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 simplifies the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and liabilities. ASU 2016-02 is effective for annual periods beginning after December 15, 2019 for non-public entities. Early adoption is permitted. The amendments of this update should be applied using a modified retrospective approach, which requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented. The Partnership is currently in the initial stages of evaluating the impact of the new standard on its accounting policies, processes and system requirements. The Partnership is also assessing the future accounting impact of this update on its financial statements and related disclosures as it applies to its PPA, land lease arrangements and other lease arrangements. As the Partnership progresses further in its analysis, the scope of this assessment could be expanded to review other types of contracts.

In May 2014, the FASB issued ASU 2014-09, which creates FASB Accounting Standards Codification (ASC) Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition (ASU 2014-09). The new standard replaces industry-specific guidance and establishes a single five-step model to identify and recognize revenue. The core principle of the new standard is that an entity should recognize revenue upon transfer of control of promised goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. Additionally, the new standard requires the entity to disclose further quantitative and qualitative information regarding the nature and amount of revenues arising from contracts with customers, as well as other information about the significant judgments and estimates used in recognizing revenues from contracts with customers. The partnership expects to adopt these updates beginning January 1, 2019. The adoption of ASC 606 has been assessed and determined that there will not be a material impact on the financial statements.

In October 2018, the FASB issued ASU 2018-16, Derivatives and Hedging (Topic ASC 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes (ASU 2018-16), which expands the list of U.S. benchmark interest rates permitted in the application of hedge accounting. Because of concerns about the sustainability of LIBOR, the Federal Reserve Board and the Federal Reserve Bank of New York (Fed) initiated an effort to introduce an alternative reference rate in the United States. The SOFR is calculated by the Fed based on the interest rates banks charge one another in the overnight market, typically called repurchase agreements, and because it is based on transactions in the open market, it is more reflective of market conditions than LIBOR, which relies on judgment. The provisions of ASU 2017-12 (discussed below) and ASU 2018-16 are effective for fiscal years beginning after December 15, 2019, with early adoption permitted. Initial adoption of ASU 2017-12 is required to be reported using a modified retrospective approach, with the exception of the presentation and disclosure requirements which are required to be applied prospectively. The

Partnership is currently in the process of determining the impact of adoption of the provisions of ASU 2017-12 and ASU 2018-16.

In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12), which amends the presentation and disclosure requirements and changes how companies assess effectiveness. The amendments are intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting, and increase transparency as to the scope and results of hedging programs. ASU 2017-12 is effective for annual periods beginning after December 15, 2019. ASU 2017-12 requires a modified retrospective transition method in which the Partnership will recognize the cumulative effect of the change on the opening balance of each affected component of equity in the balance sheet as of the date of adoption. While the Partnership continues to assess all potential impacts of the standard, the adoption is not expected to have a material impact on its future consolidated financial statements.

3 Restricted cash

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

The following table presents the components of restricted cash:

	December 31,		
	2018	2017	
Completion reserve account	\$3,172	\$3,172	
Security deposits for letters of guarantee		10	
Subtotal	3,172	3,182	
Less: Current portion	(3172)	(10)	
Restricted cash, non-current	\$—	\$3,172	

The amount completion reserve account is reserved to pay outstanding project costs specified during term conversion. Upon full payment of outstanding project costs, the remaining balance will be released from restricted cash.

The Partnership provided \$50 to the County of Bruce as the security deposit for road use in 2014. The security deposit of \$50 was reduced to \$10 in 2016 and released in 2018.

4Property, plant and equipment

The following is a summary of property, plant and equipment, at cost less accumulated depreciation, at:

December 31

	December 31,		
	2018	2017	
Power plant	\$542,095	\$542,095	
Machinery and equipment	169	169	
Asset retirement obligation - asset	t 4,768	4,768	
Capital spares	299	_	
Subtotal	547,331	547,032	
Less: Accumulated depreciation	(67,529)	(45,627)	
	\$479,802	\$501,405	

Depreciation expense of \$21,902, \$21,903 and \$4,494 was charged to the statements of operations and comprehensive income for the years ended December 31, 2018 and 2017 and the stub period, respectively.

5Long-term debt

Upon achievement of the COD in December 2015, the construction facility converted to term loan on May 20, 2016. The loan matures on May 20, 2023. In connection with the financing agreement, the Partnership entered into interest rate swaps on 90% of the loan commitment.

Collateral under the financing agreement consists of substantially all of the Partnership's assets. The loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict the Partnership's ability to incur debt, grant liens, sell or lease assets, transfer equity interest, dissolve, pay distributions and change its business. The Partnership is in compliance with all loan covenants. All of the limited and general partners and shareholders of general partners pledged shares of partnership units or common stock owned as collateral for the loan.

Terms and conditions of outstanding borrowings were as follows:

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

As of December 31, 2018

Deferred Net of

Principal financing financing Interest rate Maturity date

costs costs

Term loan \$489,823 \$(5,142) \$484,681 3.875 % May 20, 2023

Less: current portion (23,352) 1,284 (22,068) Net of current \$466,471 \$(3,858) \$462,613

As of December 31, 2017

Deferred Net of

Principal financing financing Interest rate Maturity date

costs costs

Term loan \$510,133 \$(6,480) \$503,653 3.035 % May 20, 2023

Less: current portion (20,310) 1,338 (18,972) Net of current \$489,823 \$(5,142) \$484,681

The following are the amounts due for long-term debt as of December 31, 2018:

2019 \$23,352 2020 25,250 2021 26,514 2022 27,836 2023 25,986 Thereafter 360,885

\$489,823

Interest and commitment fees incurred, and interest expense recorded in the Partnership's statements of operations and comprehensive income are as follows:

2018 2017 2016

Interest incurred \$21,102\$21,457\$4,613 Amortization of deferred financing costs 1,338 1,381 285 Interest expense \$22,440\$22,838\$4,898

Letter of credit facilities

On May 20, 2016, letters of credit of \$30,000 and \$11,000 were issued upon term conversion for a debt service reserve and operations and maintenance reserve, respectively, with a seven-year term. Funds, when and if drawn on the facility, accrue interest at 0.625% plus Prime Rate, and at the partners' option, the rate can be converted to a rate of CDOR plus 1.625% per annum. In addition, the Partnership shall pay letter of credit fees on the basis of the undrawn amount of the facility at 1.625% per annum. As of December 31, 2018 and 2017, the letters of credit facility did not have an outstanding balance, and no amounts were drawn in 2018 and 2017. Letter of credit fees of \$666, \$666 and \$140 were charged to other expense in the statements of operations and comprehensive income for the year ended December 31, 2018, 2017 and the stub period, respectively.

6Asset retirement obligation

The Partnership's asset retirement obligation represents the estimated cost of decommissioning the turbines, removing above-ground installations and restoring the sites at a date that is 25 years from the commencement of commercial operations.

The following table presents a reconciliation of the beginning and ending aggregate carrying amount of the asset retirement obligation:

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

December 31,

2018 2017

Asset retirement obligation, beginning of period \$5,274 \$5,023 Accretion expense 263 251

Asset retirement obligation, end of period \$5,537 \$5,274

7 Derivatives

The Partnership uses interest rate derivatives to manage its exposure to fluctuations in interest rates. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon movement in market prices. The Partnership's objectives for holding these derivative instruments include reducing, eliminating and efficiently managing the economic impact of interest rate exposures as effectively as possible. The Partnership does not hedge all of its interest rate risks, thereby exposing the unhedged portions to changes in market prices.

The following tables present the fair values of the Partnership's derivative instruments on a gross basis as reflected on the Partnership's balance sheets:

December 31, December 31,

2018 2017

Derivative liabilities
liabilities
Current Long-term Current Long-term

Fair value of designated derivatives:

Interest rate swaps \$1,761 \\$ 22,476 \\$ 3,703 \\$ 22,338 Total fair value \$1,761 \\$ 22,476 \\$ 3,703 \\$ 22,338

The following table summarizes the notional amounts of the Partnership's outstanding derivative instruments:

December 31,

Unit of measure 2018 2017

Designated derivative instruments

Interest rate swaps CAD \$440,840\$459,119

The following table presents losses on derivative contracts designated and qualifying as cash flow hedges recognized in accumulated other comprehensive loss for the following periods:

December 31,

Description 2018 2017 2016

Income recognized in accumulated OCL Effective portion \$1,804\$16,871 \$19,218

Losses reclassified from accumulated OCL into interest expense Derivative settlements \$4,163\$(7,680)\$(2,154)

No ineffectiveness was recorded on these swaps for the years ended December 31, 2018 and 2017 and the stub period. The Partnership estimates that \$1,952 in accumulated other comprehensive loss will be reclassified into earnings over the next twelve months.

8Fair value measurement

The Partnership's fair value measurements incorporate various factors, including the credit standing and performance risk of the counterparties, the applicable exit market, and specific risks inherent in the instrument. Non-performance and credit risk adjustments

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2018 (not covered by the auditor's report), 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

on risk management instruments are based on current market inputs when available, such as credit default swap spreads. When such information is not available, internal models are used.

Assets and liabilities recorded at fair value in the financial statements are categorized based on the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to valuation of these assets or liabilities are as follows:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2 - Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

Short-term financial instruments consist principally of cash and cash equivalents, restricted cash, accounts payable and other accrued liabilities. Based on the nature and short maturity of these instruments their fair value is approximated using carrying cost and they are presented in the financial statements at carrying cost.

Long-term debt is presented on the balance sheets at amortized cost. The fair value of variable interest rate for long-term debt is approximated by its carrying cost.

Derivatives are presented in the financial statements at fair value. The interest rate swaps were valued by discounting the net cash flows using the forward CDOR curve with the valuations adjusted by the Project's credit default swap rate.

The following table presents the fair values according to each defined level.

Financial assets (liabilities) measured on a recurring basis:

Level 1 Level 2 Level 3

December 31, 2018

Interest rate swaps \$— \$(24,237) \$—

December 31, 2017

Interest rate swaps \$— \$(26,041) \$—

9Commitments and contingencies

1) Commitments

Land lease agreements

The Partnership has entered into various long-term land lease agreements. The annual fees range from minimum rent payments to maximum rent payments of a certain percentage of energy delivered revenues, varying by lease. Lease payments, including amortization of the lease option, of \$1,909, \$1,735 and \$369 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018, 2017 and the stub period, respectively.

The future payments related to these leases as of December 31, 2018 are as follows:

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

2019	\$2,051
2020	2,051
2021	2,054
2022	2,054
2023	2,054
Thereafter	34,333
Total	\$44,597

Service and Maintenance Agreement

The Partnership has entered into service and maintenance agreements with Siemens to provide and carry out turbine maintenance and service activities for the Project until January 2019. Based on the terms of the agreements, Siemens shall be entitled to receive a daily base fee per turbine that may be subject to periodic price adjustments for inflation, over the terms of the agreements. As of December 31, 2018, outstanding commitments with Siemens were \$308, including an estimated annual price adjustment for inflation of 2%, where applicable, payable over the full term of the agreement.

2) Contingencies

Development Agreement

On May 21, 2014, the Partnership entered into a Development Agreement (DA) with the Corporation of the Municipality of Kincardine, in which the Partnership committed to twenty annual contributions of \$630 plus an initial contribution of \$1,030. In exchange for DA payments, the municipality undertakes certain obligations to support the Project, including entering into a road use agreement.

Turbine Availability Warranty

The Partnership has a turbine availability warranty from its turbine manufacturer. Pursuant to the warranty, if a turbine operates at less than minimum availability during the warranty period, the turbine manufacturer is obligated to pay, as liquidated damages, an amount for each percent that the turbine operates below the minimum availability threshold. In addition, if a turbine operates at more than a specified availability during the warranty period, the Partnership has an obligation to pay a bonus to the turbine manufacturer. As of December 31, 2018, the Partnership recorded a liability of \$605 associated with bonuses payable to the turbine manufacturer.

10Related party transactions

The Partnership is controlled by the GP, which is jointly controlled by Samsung and Pattern in accordance with the terms of the Shareholder Agreement. Certain terms of the Samsung Pattern Joint Venture Wind Development Agreement, entered into between Samsung and an affiliate of PRHC on July 27, 2010, directed the responsibilities of Samsung and PRHC for the Project.

The following transactions were carried out with related parties:

a) Management, Operation, and Maintenance Agreement (MOMA)

On October 24, 2014, the Partnership entered into a MOMA with Pattern Operators Canada ULC, which is owned by an affiliate of Pattern to operate and manage the maintenance of the wind plant and to perform certain other services pertaining to the wind plant in accordance with terms and conditions set forth in the MOMA.

\$1,403, \$1,377 and \$277 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018 and 2017 and the stub period, respectively.

SP Armow Wind Ontario LP

Notes to Financial Statements

For the year ended December 31, 2017 and the period from October 18, 2016 to December 31, 2016

(In thousands of Canadian Dollars)

b) Project Administration Agreement (PAA)

On October 24, 2014, the Partnership entered into the PAA with SRE Wind PA LP (PA), which is 100% owned by Samsung to supply project administrative services.

\$420, \$413 and \$83 were charged to the statements of operations and comprehensive income for the years ended December 31, 2018 and 2017 and the stub period, respectively.

c) The Partnership recorded the following balances with related parties:

	2018	2017
Related party payable to Pattern Operators Canada ULC	\$132	\$144
Related party payable to SRE Wind PA LP	40	39
	\$172	\$183

FINANCIAL STATEMENTS
K2 Wind Ontario Limited Partnership
As of December 31, 2017 and
for the period January 1, 2018 to December 30, 2018 (unaudited) and
for the years ended December 31, 2017 and 2016

K2 Wind Ontario Limited Partnership Financial Statements As of December 31, 2017 and for the period January 1, 2018 to December 30, 2018 (unaudited) and for the years ended December 31, 2017 and 2016

Contents	Page
Report of Independent Registered Public Accounting Firm	<u>S-61</u>
Financial Statements	
Balance Sheet	<u>S-62</u>
Statements of Operations and Comprehensive Income	<u>S-63</u>
Statements of Changes in Partners' Capital (Deficit)	<u>S-64</u>
Statements of Cash Flows	<u>S-65</u>
Notes to Financial Statements	<u>S-66</u>

Report of Independent Registered Public Accounting Firm The Partners K2 Wind Ontario Limited Partnership

We have audited the accompanying financial statements of K2 Wind Ontario Limited Partnership, which comprise the balance sheet as of December 31, 2017 and the related statements of operations and comprehensive income, changes in partners' capital (deficit) and cash flows for the two years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of K2 Wind Ontario Limited Partnership at December 31, 2017, and the results of its operations and its cash flows for the two years then ended in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP San Francisco, California February 28, 2018

K2 Wind Ontario Limited Partnership

Balance Sheet

(In thousands of Canadian Dollars)

	December 31, 2017
Assets	
Current assets: Cash and cash equivalents Trade receivables Prepaid expenses Other current assets Deferred financing costs, current, net Total current assets	\$16,000 21,344 1,652 205 61 39,262
Restricted cash Property, plant and equipment, net Deferred financing costs Total assets	8,061 785,897 877 \$834,097
Liabilities and members' capital Current liabilities: Accounts payable and other accrued liabilities Accrued interest Accrued construction costs Related party payable Derivative liabilities, current Other current liabilities Current portion of long-term debt, net Total current liabilities	\$2,457 3,128 624 157 7,915 287 32,429 46,997
Long-term debt, net Derivative liabilities Asset retirement obligation Total liabilities	710,276 59,400 5,278 821,951
Commitments and contingencies (Note 8)	
Partners' capital (deficit): Capital (deficit) Accumulated income Accumulated other comprehensive income Total partners' capital (deficit) Total liabilities and partners' capital (deficit)	(49,086) 128,547 (67,315) 12,146 \$834,097

See accompanying notes to financial statements.

K2 Wind Ontario Limited Partnership Statements of Operations and Comprehensive Income (In thousands of Canadian Dollars)

	For the		
	period		
	January 1,	Year ende	
	2018 to	December	r 31,
	December		
	30,		
	2018	2017	2016
Revenue:	(unaudited)		
Electricity sales	\$100,773	\$87,012	\$99,525
Compensation for forgone energy	32,949	56,089	40,389
Total revenue	133,722	143,101	139,914
Cost of revenue:			
Operations and maintenance	11,564	11,443	11,042
General and administrative	5,889	6,255	6,066
Depreciation and accretion	35,720	35,306	35,295
Total cost of revenue	53,173	53,004	52,403
Operating income	80,549	90,097	87,511
Other income (expense):			
Interest expense	(37,091)	(38,043)	(39,503)
Other income (expense), net	167	87	(1)
Total other expense	(36,924)	(37,956)	(39,504)
Net income	43,625	52,141	48,007
Other comprehensive income (loss):			
Change in unrealized gain (loss) on cash flow hedges	(3,878)	11,190	(15,597)
Reclassifications to net income	8,808	14,121	15,978
Total other comprehensive income (loss)	4,930	25,311	381
Total comprehensive income	\$48,555	\$77,452	\$48,388

See accompanying notes to financial statements.

K2 Wind Ontario Limited Partnership Statements of Changes in Members' Capital

(In thousands of Canadian Dollars)

	Contributed		Accumulated	
		Accumulated	Other	Total
	Surplus (Deficit)	Income	Comprehensive	Total
	(Deficit)		Income (Loss)	
Balances at January 1, 2016	\$82,778	\$ 28,399	\$ (93,007)	\$18,170
Distributions	(71,845)		_	(71,845)
Net income (loss)	_	48,007	_	48,007
Other comprehensive income (loss)			381	381
Balances at December 31, 2016	10,933	76,406	(92,626)	(5,287)
Distributions	(60,019)		_	(60,019)
Net income (loss)	_	52,141	_	52,141
Other comprehensive income (loss)			25,311	25,311
Balances at December 31, 2017	\$(49,086)	\$ 128,547	\$ (67,315)	\$12,146
Distributions (unaudited)	(58,236)		_	(58,236)
Net income (loss) (unaudited)		43,625	_	43,625
Other comprehensive income (loss) (unaudited)		_	4,930	4,930
Balances at December 30, 2018 (unaudited)	\$(107,322)	\$ 172,172	\$ (62,385)	\$2,465

See accompanying notes to financial statements.

K2 Wind Ontario Limited Partnership Statements of Cash Flows (In thousands of Canadian Dollars)

	For the		
	period	3 7	1. 1
	January 1,	Year end	
	2018 to	Decembe	er 31,
	December		
	30,	2017	2016
	2018	2017	2016
Operating activities	(unaudited)		# 40 00
Net income	\$ 43,625	\$52,141	\$48,007
Adjustments to reconcile net income to net cash provided by operating activities:	25.520	25.206	25.205
Depreciation and accretion	35,720	35,306	35,295
Amortization of financing costs	1,346	1,401	1,460
Trade receivables	5,460	3,747	(5,717)
Prepaid expenses	79	99	(208)
Other current assets		•) 215
Accounts payable and other accrued liabilities	1,335) 2,337
Related party payable	98) (617)
Accrued interest	. ,		
Other current liabilities	` /	1	24
Net cash provided by operating activities	87,085	89,280	80,796
Investing activities			
Capital expenditures	_	(44	(9,433)
Net cash (used in) investing activities		(44) (9,433)
Financing activities			
Payment for deferred financing costs	(6)	_	(62)
Capital distributions	(58,228)	(60,019	(71,845)
Repayment of long-term debt	(33,714)	(31,212	(32,581)
Net cash used in financing activities	(91,948)	(91,231	(104,488)
Net change in cash and cash equivalents and restricted cash	(4,863)	(1,995) (33,125)
Cash and cash equivalents and restricted cash at beginning of period	24,061	26,056	59,181
Cash and cash equivalents and restricted cash at end of period	\$ 19,198	\$24,061	\$26,056
Supplemental disclosures			
Cash payments for interest expense, net of capitalized interest	\$ 35,847	\$36,790	\$38,780

See accompanying notes to financial statements.

K2 Wind Ontario Limited Partnership Notes to Financial Statements

The period January 1, 2018 to December 30, 2018 is unaudited.

1. General information

Business

K2 Wind Ontario Limited Partnership (K2 Wind or the Company), a limited partnership under the laws of the Province of Ontario, was formed on July 27, 2011, as a joint venture project between Capital Power L.P., Samsung Renewable Energy Inc. (Samsung) and Pattern Renewable Holdings Canada ULC (PRHC), each holding a 33.33% ownership interest as limited partners of the Company, and K2 Wind Ontario Inc. (the GP), holding a 0.01% ownership interest as general partner of the Company.

The GP is a corporation jointly owned among affiliates of Samsung, Pattern Energy Group Inc. (Pattern), and Capital Power. The Samsung affiliate originally owned a 50% GP interest and the Pattern and Capital Power affiliates each originally owned a 25% GP interest.

On June 17, 2015, Pattern K2 LP Holdings LP transferred all of its interests in K2 Wind to PRHC and PRHC subsequently transferred all of its interests in K2 Wind to Pattern Canada Finance Company ULC, a wholly owned subsidiary of Pattern.

On March 15, 2016, Samsung transferred a portion of its GP interest so that each of the Samsung, Pattern and Capital Power affiliates then held equal 33.33% interests in the GP.

On July 7, 2016, CP K2 Holdings Inc.'s LP interest in K2 Wind, was transferred through an internal reorganization to Capital Power LP Holdings Inc., an entity wholly owned by Capital Power.

On August 5, 2016, Samsung sold its LP interest in K2 Wind to K2 Wind Co LP and its GP interest to K2 Wind Co GP Inc. K2 Wind Co LP and K2 Wind Co GP Inc. are owned by a consortium of Axium Infrastructure Canada II LP, ATRF INF (DB) LTD. and The Manufacturers Life Insurance Company.

On December 31, 2018, Pattern and Capital Power L.P. sold all of their interest in K2 Wind to K2 Wind Co LP and K2 Wind Co GP Inc. K2 Wind is continuing operations post sale and these financials have been prepared with K2 Wind operating as an ongoing venture. A balance sheet as of December 31, 2018 is not presented due to the change in ownership.

The partners' liability and losses for K2 Wind are limited to each limited partner's capital contribution plus any unpaid capital contributions agreed to by the partners. The partners shall not be required to make additional capital contributions, or have any personal liability, in respect of the liabilities or the obligations of K2 Wind.

These United States Generally Accepted Accounting Principles (U.S. GAAP) financials are presented for the purposes of inclusion in Pattern's annual report on Form 10-K under the requirements of SEC Rule S-X 3-09. The unaudited financial statements for 2018 present information only for the period in which Pattern held its interest in K2 Wind. The Project

K2 Wind owns a 270 megawatt (MW) wind project consisting of 140 wind turbine generators located in the township of Ashfield Colborne Wawanosh in Ontario, Canada (the Project). The Project reached its commercial operation date (COD) on May 29, 2015.

The Company has a power purchase agreement (PPA) with the Independent Electricity System Operator (IESO) for a period of 20 years from the COD. The IESO oversees the wholesale electricity market, where the price of energy is determined. It also administers the rules that govern the market and, through an arm's-length market monitoring function, ensures that it is operated fairly and efficiently. The IESO is an agent among the market participants in Ontario and is neither exposed to, nor benefits from, any transactions. In such capacity, the IESO executes agreements to help the market meet the renewable energy mandates of the government of the Province of Ontario. There are approximately 70 electric distribution companies in Ontario, all of which have government mandates to purchase renewable energy. The PPA provides for guaranteed pricing from IESO that removes volatility caused by fluctuations in market rates. The Ontario government established the Global Adjustment (GA) which is designed to adjust consumer rates depending on the price of energy. The IESO establishes a monthly variable GA rate based on GA costs and Ontario electricity demand which effectively establishes a pass through mechanism to the consumer and

eliminates the IESO's economic exposure to our contract price.

K2 Wind Ontario Limited Partnership Notes to Financial Statements

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying financial statements are presented using U.S. GAAP. The preparation of U.S. GAAP basis financial statements requires management to make certain estimates and assumptions that affect the reported amounts and disclosures in the financial statements and the reported amounts of assets and liabilities, and to disclose contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Because the use of estimates is inherent in the financial reporting process, actual results could differ from those estimates.

These financial statements do not include assets, liabilities, revenue and expenses of the GP and limited partners. Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences may be material to the financial statements. Functional and Presentation Currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the Company operates, the (functional currency). The financial statements are presented in Canadian dollars, which is the Company's functional and presentation currency.

Fair Value of Financial Instruments

ASC 820, Fair Value Measurement, defines fair value as the price at which an asset could be exchanged or a liability transferred in an orderly transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or derived from such prices. Where observable prices or inputs are not available, valuation models are applied. These valuation techniques involve some level of management estimation and judgment, the degree of which is dependent on the price transparency for the instruments or market and the instruments' complexity.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash in banks and highly liquid investments with original maturities of three months or less.

Restricted Cash

Restricted cash consists of cash balances required to collateralize commercial bank letter of credit facilities related primarily to the PPA and for reserves required under the Company's credit agreements. Non-current restricted cash includes \$5.0 million as of December 31, 2017 of construction completion costs that were moved into a restricted cash account upon conversion of the construction loan to term loan.

Reconciliation of Cash and Cash Equivalents and Restricted Cash as presented on the Statements of Cash Flows Restricted cash consists of cash balances which are restricted as to withdrawal or usage and includes cash to collateralize bank letters of credit related primarily to interconnection rights, PPA and for certain reserves required under the Company's loan agreements. The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheet that sum to the total of the same such amounts shown in the statements of cash flows (in thousands):

December 31, 2017 2016 \$16,000 \$17,975 8,061 8,081 s \$24,061 \$26,056

Year ended

Cash and cash equivalents Restricted cash

Cash, cash equivalents and restricted cash shown in the statements of cash flows

K2 Wind Ontario Limited Partnership Notes to Financial Statements

Trade Receivables

The Company's trade receivables are generated by selling energy in Ontario, Canada through the IESO as a settlement agent. The Company believes that all amounts are collectible and an allowance for doubtful accounts is not required. Property, Plant and Equipment

The Project is recorded at historical cost on the balance sheets. The Project is being depreciated using the straight-line method over its 25-year life beginning at the COD. Capitalized assets acquired in support of the plant operations are recorded at cost and depreciated using the straight-line method over the estimated useful life of the asset.

The remaining assets are depreciated over two to five years. Improvements to property, plant and equipment deemed to extend the useful economic life of an asset are capitalized. Repair and maintenance costs are expensed as incurred. Impairment of Long-Lived Assets

The Company periodically evaluates long-lived assets for potential impairment whenever events or changes in circumstances have occurred that indicate that impairment may exist, or the carrying amount of the long-lived asset may not be recoverable. An impairment loss is recognized only if the carrying amount of a long-lived asset is not recoverable based on its estimated future undiscounted cash flows. An impairment loss is calculated based on the excess of the carrying value of the long-lived asset over the fair value of such long-lived asset, with the fair value determined based on an estimate of discounted future cash flows. During the period January 1, 2018 to December 30, 2018 and the years ended December 31, 2017 and 2016, no impairment losses were recorded in the statements of operations and comprehensive income.

Deferred Financing Costs

Financing costs incurred in connection with obtaining construction and term financing are deferred and amortized over the terms of the respective loans using the effective-interest method. Deferred financing costs are capitalized and recorded as an offset to the respective loans in the Company's balance sheets and are amortized to interest expense in the statements of operations and comprehensive income (loss). Deferred financing costs incurred in connection with obtaining letters of credit are recorded as a separate asset in the Company's balance sheets and are amortized using the straight-line method over the term of the letters of credit to interest expense in the statements of operations and comprehensive income.

Derivatives and Risk Management

The Company may enter into interest rate swaps, interest rate caps, forwards and other agreements to manage its interest rate risk. The Company recognizes its derivative instruments as assets or liabilities at fair value in the balance sheets. The Company does not have contracts subject to master netting agreements with counterparties, as such assets and liabilities are presented gross on the balance sheets.

Accounting for changes in the fair value of a derivative instrument depends on whether it has been designated as part of a hedging relationship and on the type of hedging relationship. For derivative instruments that qualify and are designated as cash flow hedges, the effective portion of change in fair value of the derivative is reported as a component of other comprehensive income (OCI) until the contract settles and the hedged item is recognized in earnings. The ineffective portion of change in fair value is recorded as a component of net income (loss) on the statements of operations and comprehensive income. The Company discontinues hedge accounting when it has determined that a derivative contract no longer qualifies as an effective hedge or when it is no longer probable that the hedged forecasted transaction will occur.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, restricted cash, debt, derivatives and revenue. The Company places its cash and restricted cash with high-quality institutions. The Company's derivative instruments are placed with counterparties that are credit worthy institutions.

Contingent Liabilities

Contingent liabilities are recognized when the Company has a present legal obligation as a result of past events for which it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reasonably estimated. Contingent liabilities are not recognized for future operating losses.

K2 Wind Ontario Limited Partnership Notes to Financial Statements

Other Liabilities

Other liabilities are recognized when the Company has a present legal obligation as a result of past events for which it is probable that an outflow of resources will be required to settle the obligation, and the amount can be reasonably estimated.

Asset Retirement Obligation

The Company records an asset retirement obligation (ARO) for the estimated costs of decommissioning turbines, removing above-ground installations and restoring sites, at the time when a contractual decommissioning obligation is incurred. The ARO represents the present value of the expected costs and timing of the related decommissioning activities. The ARO asset and liability are recorded in property, plant and equipment and asset retirement obligation, respectively, on the accompanying balance sheets. The Company records accretion expense, which represents the increase in the asset retirement obligation, over the remaining or operational life of the Project. Accretion expense is recorded as operating costs in the statements of operations and comprehensive income using an accretion rate based on a credit adjusted risk-free interest rate. Changes resulting from revisions to the timing or amount of the original estimate of cash flows are recognized as an increase or a decrease in the asset retirement cost, or income when the asset retirement cost is depleted.

Income Taxes

The financial statements of the Company reflect no provision or liability for income taxes because profits and losses of the Company are allocated to the partners and are included in the income tax returns of the partners. Income and losses for tax purposes may differ from the financial statement amounts and the partners' capital (deficit) reflected in the financial statements does not necessarily reflect their tax basis.

Revenue Recognition

The Company sells the electricity it generates through the IESO. Revenue is recognized based upon the amount of electricity delivered or curtailed at rates specified under the contracts, assuming all other revenue recognition criteria are met. Revenue earned from curtailment is recorded as compensation for forgone energy in the statements of operations and comprehensive income (loss). The Company evaluates its PPA to determine whether it is in substance a lease or derivative and, if applicable, recognizes revenue pursuant to ASC 840, Leases, and ASC 815, Derivatives and Hedging, respectively. The PPA was not considered a lease or a derivative instrument, as multiple market participants purchase the energy at market-based prices with IESO working as a settlement agent. As a result, revenue (including any revenue from the price guaranteed by IESO), is recognized on an accrual basis in accordance with ASC 605, Revenue Recognition.

Cost of Revenue

The Company's cost of revenue is comprised of direct costs of operating and maintaining its project facilities, including labor, turbine service arrangements, metering service and shadow settlements, environmental fees, land lease royalties, property taxes, insurance costs, depreciation of long-lived assets and accretion associated with the Company's ARO.

Recently Issued Accounting Standards Not Yet Adopted

In October 2018, the Financial Accounting Standards Board (FASB) issued ASU 2018-16, Derivatives and Hedging (Topic ASC 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes (ASU 2018-16), which expands the list of U.S. benchmark interest rates permitted in the application of hedge accounting. Because of concerns about the sustainability of LIBOR, the Federal Reserve Board and the Federal Reserve Bank of New York (Fed) initiated an effort to introduce an alternative reference rate in the United States. The SOFR is calculated by the Fed based on the interest rates banks charge one another in the overnight market, typically called repurchase agreements, and because it is based on transactions in the open market, it is more reflective of market conditions than LIBOR, which relies on judgment. The provisions of ASU 2017-12 (discussed below) and ASU 2018-16 are effective for fiscal years beginning after December 15, 2018, including interim periods, with early adoption permitted. Initial adoption of ASU 2017-12 is required to be reported using a modified retrospective approach, with the exception of the presentation and disclosure requirements which are required to be applied prospectively. The Company is currently in the process of determining

the impact of adoption of the provisions of ASU 2017-12 and ASU 2018-16.

K2 Wind Ontario Limited Partnership Notes to Financial Statements

In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities (ASU 2017-12), which amends the presentation and disclosure requirements and changes how companies assess effectiveness. The amendments are intended to more closely align hedge accounting with companies' risk management strategies, simplify the application of hedge accounting, and increase transparency as to the scope and results of hedging programs. ASU 2017-12 is effective for annual periods beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early application is permitted. The Company is currently assessing the future impact of this update on its consolidated financial statements and related disclosures. In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which requires the measurement of all expected credit losses for financial assets including trade receivables held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. ASU 2016-13 is effective for fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. The Company is currently assessing the future impact of this update on its consolidated financial statements and related disclosures. In February 2016, the FASB issued ASU 2016-02, Leases (ASU 2016-02), which requires lessees to recognize right-of-use assets and lease liabilities, for all leases, with the exception of short-term leases, at the commencement date of each lease. Under the new guidance, lessor accounting is largely unchanged. ASU 2016-02 simplifies the accounting for sale and leaseback transactions primarily because lessees must recognize lease assets and liabilities. ASU 2016-02 is effective for annual periods beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The amendments of this update should be applied using a modified retrospective approach, which requires lessees and lessors to recognize and measure leases at the beginning of the earliest period presented. The Company is in the initial stages of evaluating the impact of the new standard on its accounting policies, processes and system requirements. The Company is also assessing the accounting impact of ASU 2016-02 as it applies to its PPAs, land leases, office leases and equipment leases. As the Company progresses further in its analysis, the scope of this assessment could be expanded to review other types of contracts. In May 2014, the FASB issued ASU 2014-09, which creates ASC Topic 606, Revenue from Contracts with Customers and supersedes ASC Topic 605, Revenue Recognition. The new standard replaces industry-specific guidance and establishes a single five-step model to identify and recognize revenue. The core principle of the new standard is that an entity should recognize revenue upon transfer of control of promised goods or services to customers in an amount that reflects the consideration to which an entity expects to be entitled in exchange for those goods or services. Additionally, the new standard requires the entity to disclose further quantitative and qualitative information regarding the nature and amount of revenues arising from contracts with customers, as well as other information about the significant judgments and estimates used in recognizing revenues from contracts with customers. The Company expects to adopt these updates beginning January 1, 2019. The adoption of ASC 606 has been assessed and determined that there will not be a material impact on the financial statements.

3. Property, Plant and Equipment

The aggregate cost of property, plant and equipment and accumulated depreciation were as follows (in thousands):

December 31,

2017

Furniture, fixtures, and equipment \$52 Land 1,067 Operating wind farm 875,705 Subtotal 876,824 Accumulated depreciation (90,927) Property, plant and equipment, net \$785,897

The Company recorded depreciation expense related to property, plant and equipment of \$35.2 million, \$35.0 million and \$35.0 million for the period January 1, 2018 to December 30, 2018 and for the years ended December 31, 2017 and 2016, respectively.

K2 Wind Ontario Limited Partnership

Notes to Financial Statements

4. Long-Term Debt

In November 2015, the Company entered into a term loan in the amount of \$818.0 million with an amortization period of 18 years, at a variable rate interest at Canadian Dollar Offered Rate (CDOR) plus 1.75% per annum. The loan has a maturity date on November 20, 2022 due to prepayment requirements in the partnership's credit agreement. In connection with the term loan, the Company entered into interest rate swaps on 90% of the loan commitment. The interest rate swaps are organized in two tranches with fixed effective interest rates of 3.11% and 4.45% for years 1-7 and years 8-18, respectively. As of December 31, 2017, \$754.2 million was outstanding under the term loan including the current portion, and no amount was drawn on the letter of credit facilities.

Collateral under the financing agreement consists of substantially all of the Company's assets. Its loan agreement contains a broad range of covenants that, subject to certain exceptions, restrict the Company's ability to incur debt, grant liens, sell or lease assets, transfer equity interest, dissolve, pay distributions and change its business. All the limited partners, general partners and shareholders of general partners pledged shares of partnership units or common stock owned as collateral for the loan. As of December 30, 2018, the Company was in compliance with all loan covenants.

Terms and conditions of outstanding borrowings were as follows (in thousands):

		As of December 31, 2017		
	December			
	31,	Contractual Interest Rate	Effective Interest Rate	Maturity Date
	2017			
Principal	\$754,207	3.16%	4.69%	December 2025
Unamortized financing costs	(11,502)			
Current portion	(32,429)			
Long-term debt, less current portion	\$710,276			

The following are the amounts due under the Partnership's term loan for the next five years and thereafter as of December 31, 2017 (in thousands):

2018	\$33,714
2019	37,328
2020	39,338
2021	41,467
2022	41,660
Thereafter	560,700
	 A = = 4 A A

Total long-term debt, including current maturities \$754,207

Interest and commitment fees incurred and interest expense for long-term debt consisted of the following (in thousands):

	For the		
	period		
	January 1,	Year end	led
	2018 to	Decembe	er 31,
	December		
	30,		
	2018	2017	2016
Interest and commitment fees incurred	\$ 34,686	\$35,583	\$36,984
Letter of credit fees incurred	1,059	1,059	1,059
Amortization of financing costs	1,346	1,401	1,460
Interest expense	\$ 37,091	\$38,043	\$39,503

The Company has two letter of credit facilities available in the amount of \$60.5 million as set out in the Company's credit agreement. As of December 31, 2017 and during the period January 1 to December 31, 2018, no amounts had been drawn on these letters of credit.

5. Asset Retirement Obligation

The Company's ARO represents the estimated cost of decommissioning the turbines, removing above-ground installations and restoring the sites at a date that is 25 years from the COD. As of December 30, 2018 and December 31, 2017, the Company recorded \$23.3 million and \$5.3 million, respectively, in ARO using a project specific credit adjusted risk free rate at COD of 5.46%.

K2 Wind Ontario Limited Partnership

Notes to Financial Statements

In the third quarter of 2018, the Company initiated a new decommissioning cost study. As a result, the Company revised its estimated future cash flows to reflect the updated costs for its existing asset retirement obligations by approximately \$175 million. The change in estimate did not result in any charge to net income (loss) for the year ended December 31, 2018.

The following table presents a reconciliation of the beginning and ending aggregate carrying amounts of the ARO for the following periods (in thousands):

December 31,

2017

Beginning asset retirement obligation \$ 5,004

Revision in estimated future cash flows — Accretion expense 274

Ending asset retirement obligation \$ 5,278

For the period January 1, 2018 to December 30, 2018, the company recorded \$0.5 million in accretion expense.

6. Derivatives and Risk Management

The Company uses interest rate derivatives to manage its exposure to fluctuation in interest rates. Interest rate risk exists primarily on variable-rate debt for which the cash flows vary based upon movement in interest rates. The Company's objectives for holding these derivative instruments include reducing, eliminating and efficiently managing the economic impact of interest rate exposure as effectively as possible. The Company does not hedge of all of its interest rate risk, thereby exposing the unhedged portion to changes in market prices.

The following tables present the fair values of the Company's designated derivative instruments on a gross basis as reflected on the Company's balance sheets (in thousands):

December 31,

2017

Derivative Liabilities Current Long-Term Interest rate swaps \$7,915 \$ 59,400 Total Fair Value \$7,915 \$ 59,400

The following table summarizes the notional amounts of the Company's outstanding designated derivative instruments (in thousands):

December

31,

Unit of Measure 2017

Interest rate swaps CAD \$678,786

The Company's interest rate swaps have remaining maturities ranging from approximately 3.7 years to 14.6 years. The following table presents gains and losses on derivative contracts designated and qualifying as cash flow hedges recognized in accumulated other comprehensive income, as well as, amounts reclassified to earning for the following periods (in thousands):

For the period

January 1, 2018 to December 31,

December

30.

Description 2018 2017 2016

Gains (losses) recognized in accumulated OCI Effective portion \$(3,878) \$11,190\$(15,597)

Gains (losses) reclassified from accumulated OCI into:

Interest expense Derivative settlements \$8,808 \$14,121\$15,978

K2 Wind Ontario Limited Partnership Notes to Financial Statements

The Company estimates that \$4.9 million in accumulated other comprehensive income will be reclassified into earnings over the next twelve months.

No ineffectiveness was recorded on these swaps for the period January 1, 2018 to December 30, 2018 and for the years ended December 31, 2017 and 2016. The changes in the fair value of these swaps were recognized in other comprehensive income.

No margin cash collateral was received or recorded from the counterparty during the period January 1, 2018 to December 30, 2018 and for the year ended December 31, 2017.

7. Fair Value Measurements

The Company's fair value measurements incorporate various factors, including the credit standing and performance risk of the counterparties, the applicable exit market, and specific risks inherent in the instrument. Non-performance and credit risk adjustments on risk management instruments are based on current market inputs when available, such as credit default hedge spreads. When such information is not available, internal models may be used.

Assets and liabilities recorded at fair value in the combined financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to valuation of these assets or liabilities are as follows:

Level 1 - Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2 - Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability through correlation with market data at the measurement date and for the duration of the instrument's anticipated life.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date. Consideration is given to the risk inherent in the valuations technique and the risk inherent in the inputs to the model.

The carrying value of financial instruments classified as current assets and current liabilities approximates their fair value, based on the nature and short maturity of these instruments, and they are presented in the Company's financial statements at carrying cost. The fair values of cash and cash equivalents and restricted cash are classified as Level 1 in the fair value hierarchy. Certain other assets and liabilities were measured at fair value upon initial recognition and unless conditions give rise to an impairment, are not remeasured.

Long term debt is presented on the balance sheets at amortized cost. The fair value of variable interest rate long-term debt is approximated by its carrying cost, and is classified as Level 2 in the fair value hierarchy.

K2 Wind Ontario Limited Partnership

Notes to Financial Statements

The Company's financial assets and (liabilities) which require fair value measurement on a recurring basis are classified within the fair value hierarchy as follows (in thousands):

Derivative instruments subject to re-measurement are presented in the financial statements at fair value. The Company's interest rate swaps were valued by discounting the net cash flows using the forward Canadian dollar offered rate curve with the valuations adjusted by the Company's credit default hedge rate.

8. Commitments, Contingencies and Warranties

Commitments

Level 2 Inputs

The Company has entered into various purchase, construction, as well as other commitments, land leases, and turbine operations and maintenance agreements. Detailed below are estimates of future commitments under these arrangements as of December 30, 2018 (in thousands):

	2019	2020	2021	2022	2023	Thereafter	Total
Purchase and other commitments	\$715	\$718	\$721	\$724	\$727	\$ 8,014	\$11,619
Land leases	2,955	2,956	2,957	2,958	3,007	60,998	75,831
Service and maintenance	2,633	2,633	1,536	_	_	_	6,802
Total Commitments	\$6,303	\$6,307	\$5,214	\$3,682	\$3,734	\$ 69,012	\$94,252

Purchase and other commitments

The Company has entered into various commitments with service providers related to the projects and operations of its business. Outstanding commitments include those related to construction, and commitments related to donations to local community and government organizations.

In March 2013, the Company entered into an agreement with the local township in which the Company will make annual payments into a fund managed by the township in amounts of \$2,600 per nameplate MW of the Project installed capacity. The payments are calculated annually and are owed for the 20-year term of the PPA. In exchange for payments, the township undertakes certain obligations to support the Project, including entering into a road use agreement in which the Project may utilize municipal right-of-ways for collection and transmission lines.

The Company has also made various public statements that payments will be made to local landowners, for which the Company will not receive any future benefits. The Company considers these statements to be cancellable and not legally binding; therefore the Company has not recognized a liability for these amounts, nor are the payments included in the table above. Payments under the statements are approximately \$0.5 million per year, for the next 18 years. Land leases

The Company has acquired leases for land where the wind farm will be located through the exercise of land options acquired from Capital Power and also executed new land lease agreements in 2014. The leases provide for the land interests necessary for the construction and operation of the project. The Company recorded \$2.9 million, \$2.9 million and \$2.7 million of lease expense in the statements of operations and comprehensive income for the period January 1, 2018 to December 30, 2018 and the years ended December 31, 2017 and 2016, respectively.

K2 Wind Ontario Limited Partnership Notes to Financial Statements

Service and maintenance

The Company has entered into service and maintenance agreements with third party contractors to provide turbine operations and maintenance services and modifications and upgrades for a three year period beginning after the COD. The computation of outstanding commitments includes an estimated annual price adjustment for inflation of 2%, where applicable. For the period January 1, 2018 to December 30, 2018 and the years ended December 31, 2017 and 2016, the Company recorded service and maintenance expense under these agreements of \$6.4 million, \$7.3 million and \$7.1 million, respectively, in project expense in the statements of operations.

Warranties and Guarantees

Turbine Operating Warranties and Service Guarantees

The Company entered in to a warranty agreement with Siemens for a two-year period from the commissioning of each turbine. Pursuant to the warranty, if the turbines operate at less than a specified percentage of availability during each consecutive thirty month period, Siemens is obligated to pay liquidated damages to the Company. In addition, the Company will pay Siemens a bonus if the availability of the turbines exceeds a certain specified availability percentage during the thirty-month period. The Company has not recorded any liability associated with bonuses to Siemens.

Siemens

On March 8, 2013, an Operational Incentive Agreement was entered into among Samsung, an affiliate of PRHC and Siemens. The agreement defines operational objectives, the terms and conditions upon which the Company may make operational incentive payments to Siemens for achieving one or more of such operational objectives under the turbine supply agreements for joint development projects. Siemens earned an initial payment of \$1.1 million, which was paid in 2013 for having satisfied the Peak Capacity Objective defined under the agreement. The Company has not recorded any liability related to the agreement.

Legal Proceedings

Renewable Energy Approval

During the third quarter of 2015, rights to appeal prior decisions granting the Renewable Energy Approval (REA) under Ontario's Environmental Protection Act for the Project were exhausted without further appeal. As a result, a stay of a previously filed civil suit against the Project pending final determination of the REA was lifted, allowing such suit to move forward if the claimants so chose to continue such suit. The Project has been awarded their legal fees in connection with the portion of the claim that was stricken, and has reached a settlement agreement under which the Project will waive entitlement to the legal fees and in return Plaintiff has agreed to full dismissal of all pending claims.

9. Related Party Transactions

The following transactions were carried out with the related parties:

Management, Operation, and Maintenance Agreement (MOMA)

On March 20, 2014, the Company entered into the MOMA with Pattern Operators Canada ULC (POC), which is owned by an affiliate of Pattern to operate and manage the maintenance of the wind plant and to perform certain other services pertaining to the wind plant in accordance with terms and conditions set in the MOMA.

The fixed annual fee for the service is \$0.9 million pro-rated for the period from March 20, 2013 until the COD and thereafter the annual fee was increased to \$1.4 million until expiry of the contract in 2035. Additionally, the Company recorded expense of \$1.5 million, \$1.5 million and \$1.4 million to operations and maintenance expense in the statements of operations and comprehensive income for the period January 1, 2018 to December 30, 2018 and the years ended December 31, 2017 and 2016, respectively. As of December 31, 2017, the Company recorded \$0.2 million in related party payable.

Project Administration Agreement (PAA)

On March 20, 2014, the Company entered into the PAA with POC, which is 100% owned by an affiliate to receive project administrative services. A fixed annual fee of \$0.4 million is payable during the period between the COD until expiry of the PPA in 2035. The Company recorded expense of \$0.4 million, \$0.4 million and \$0.4 million to general and administrative expense in the statements of operations and comprehensive income for the period January 1, 2018 to December 30, 2018 and the years ended December 31, 2017 and 2016, respectively. The Company has not recorded any related party payable.

10. Subsequent Events

The Company evaluated subsequent events through February 28, 2019, which is the date these financial statements were available to be issued and noted that there were no subsequent events to disclose.

Schedule I - Condensed Parent-Company Financial Statements

Pattern Energy Group Inc.

Condensed Financial Information of Parent

Balance Sheets

S-77

(In millions of U.S. dollars, except share and par value data)

(In millions of U.S. dollars, except share and par value data)		r December 31, 2017	
Assets			
Current assets:			
Cash and cash equivalents	\$ 3	\$9	
Derivative assets, current	4	_	
Other current assets	17	26	
Total current assets	24	35	
Property, plant and equipment, net	2	4	
Investments in subsidiaries	1,415	1,404	
Investments in unconsolidated subsidiaries	270	311	
Derivative assets	1		
Intangible assets, net	1	1	
Other assets	1	1	
Total assets	\$ 1,714	\$ 1,756	
Liabilities and equity			
Current liabilities:			
Accounts payable and other accrued liabilities	\$ 13	\$ 12	
Accrued interest	13	13	
Dividend payable	42	41	
Derivative liabilities, current	_	3	
Contingent liabilities, current	29		
Other current liabilities	3	9	
Total current liabilities	100	78	
Long-term debt, net of financing costs of \$7 and \$9 as of December 31, 2018 and 2017,	560	553	
respectively	7	22	
Other long-term liabilities Total liabilities	7	32 663	
	667	003	
Equity: Class A common stock, \$0.01 par value per share: 500,000,000 shares authorized; 98,051,629			
and 97,860,048 shares outstanding as of December 31, 2018 and December 31, 2017,	1	1	
respectively			
Additional paid-in capital	1,103	1,207	
Accumulated income (loss)	_	(85)
Accumulated other comprehensive loss	(52)	(26)
Treasury stock, at cost; 223,040 and 157,812 shares of Class A common stock as of December			,
31, 2018 and 2017, respectively	(5)	(4)
Total equity	1,047	1,093	
Total liabilities and equity	\$1,714	\$ 1,756	
See accompanying notes to parent company financial statements	•	•	

Pattern Energy Group Inc.

Condensed Financial Information of Parent

Statements of Operations and Comprehensive Income (Loss)

(In millions of U.S. dollars)

	2018		2017	2016
Revenue	\$ —		\$ —	\$ —
Expenses	35		34	34
Operating loss	(35)	(34)	(34)
Other income (expense):				
Interest expense	(37)	(35)	(15)
Equity in earnings from subsidiaries	203		14	3
Equity in earnings from unconsolidated subsidiaries, net	1		41	30
Gain (loss) on undesignated derivatives, net	10		(7)	(1)
Other income (expense), net	(1)	(1)	
Total other income (expense), net	176		12	17
Net income (loss) before income tax	141		(22)	(17)
Tax provision (benefit)			(4)	_
Net income (loss)	141		(18)	(17)
Other comprehensive income (loss):				
Proportionate share of subsidiaries' other comprehensive income (loss), net of tax benefit (provision) of \$2, \$(5) and less than \$(1), respectively	(27)	23	5
Proportionate share of affiliates' other comprehensive income (loss) activity, net of tax provision of less than \$(1), \$(5) and \$(2), respectively	1		13	6
Total other comprehensive income (loss), net of tax	(26)	36	11
Comprehensive income (loss)	\$ 115		\$ 18	\$ (6)
See accompanying notes to parent company financial statements				

S-78

Year ended December 31,

Pattern Energy Group Inc. Condensed Financial Information of Parent Condensed Statements of Cash Flows

(In millions of U.S. dollars)

Operating activities	Year ended December 31, 2018 2017 2016
Net income (loss)	\$141 \$(18) \$(17)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:	ψ 141 ψ (10) ψ (17)
Depreciation, amortization and accretion	11 7 6
Amortization of financing costs	, ,
Amortization of debt discount	
Deferred taxes	_ 3 _
Intraperiod tax allocation	— (3) —
(Gain) loss on derivatives	(10) 5 3
Stock-based compensation	5 5 5
Equity in earnings from subsidiaries	(203) (14) (3)
Equity in earnings from unconsolidated investments, net	(1) (41) (30)
Other reconciling items	3 - (1)
Changes in operating assets and liabilities:	(-)
Other current assets	— (20) (2)
Accounts payable and other accrued liabilities	— 3 2
Other current liabilities	29 8 —
Long-term liabilities	(28) 1 4
Related party receivable/payable	2 — —
Accrued interest payable	_ 8 _
Net cash used in operating activities	(51) (56) (33)
Investing activities	(= / (= - / (= - /
Capital expenditures	(3) — (4)
Distributions received from subsidiaries	818 372 308
Contribution to subsidiaries	(490) (682) (450)
Investment in Pattern Development	(115)(69)—
Other assets	2 (1) (1)
Net cash provided by (used in) investing activities	212 (380) (147)
Financing activities	
Proceeds from public offering, net of issuance costs	— 237 286
Proceeds from issuance of senior notes, net of issuance costs	— 343 —
Repurchase of shares for employee tax withholding	(1)
Dividends paid	(166) (145) (120)
Other financing activities	— (2) (1)
Net cash provided by (used in) financing activities	(167) 433 165
Net change in cash, cash equivalents and restricted cash	(6) (3) (15)
Cash, cash equivalents and restricted cash at beginning of period	9 12 27
Cash, cash equivalents and restricted cash at end of period	\$3 \$9 \$12
Supplemental disclosures	
Cash payments for interest expense	\$30 \$20 \$9
Schedule of non-cash activities	
Change in property, plant and equipment	(5) — —

Non-cash increase in additional paid-in capital

\$-- \$(2) \$--

See accompanying notes to parent company financial statements

Pattern Energy Group Inc.

Note to Parent Company Financial Statements

Supplemental Notes

1. Summary of Significant Accounting Policies

Basis of Presentation

The condensed, standalone financial statements of Pattern Energy Group Inc. (parent company) have been presented in accordance with Rule 12-04, Schedule I of Regulation S-X as the restricted net assets of the subsidiaries of the parent company exceed 25% of the consolidated net assets of the parent company and its subsidiaries. The condensed parent company financial statements have been prepared in accordance with United States generally accepted accounting principles and should be read in conjunction with the parent company's consolidated financial statements and the accompanying notes thereto.

Reconciliation of Cash and Cash Equivalents and Restricted Cash as presented on the Statements of Cash Flows (in millions)

Year ended December 31, 2018017 2016

Cash and cash equivalents \$3 \$ 9 \$ 12

Investments

For purposes of these financial statements, the parent company's wholly owned and majority owned subsidiaries are recorded based on its proportionate share of the subsidiaries' assets. The parent company's share of net income of its unconsolidated subsidiaries is included in income using the equity method.

Debt

2024 Unsecured Senior Notes

In January 2017, the Company issued unsecured senior notes with an aggregate principal amount of \$350 million (the 2024 Notes). Net proceeds to the Company were approximately \$345 million, after deducting the initial purchasers' discount, commissions and transaction expenses. The 2024 Notes bear interest at a rate of 5.875% per year, payable semiannually in arrears on February 1 and August 1, beginning on August 1, 2017 and maturing on February 1, 2024, unless repurchased or redeemed at an earlier date. The 2024 Notes are guaranteed on a senior unsecured basis by Pattern US Finance Company, one of the Company's subsidiaries.

Convertible Senior Notes due 2020

In July 2015, the Company issued \$225 million aggregate principal amount of 4.00% convertible senior notes due 2020 (2020 Notes). The 2020 Notes bear interest at a rate of 4.00% per year, payable semiannually in arrears on January 15 and July 15 of each year, beginning on January 15, 2016. The 2020 Notes will mature on July 15, 2020. The 2020 Notes were sold in a private placement. Upon conversion, the Company may, at its discretion, pay cash, shares of the Company's Class A common stock, or a combination of cash and stock. The 2020 Notes are set at an initial conversation rate of 35.4925 shares of Class A common stock per \$1,000 principal amount of 2020 Notes, which is equivalent to an initial conversion price of approximately \$28.175 per share of Class A common stock. The conversion rate is subject to adjustment in some events (including, but not limited to, certain cash dividends made to holders of the Company's Class A common stock which exceed the initial dividend threshold of \$0.363 per quarter per share). The conversion rate would be adjusted to offset the effect of the portion of the dividend in excess of \$0.363, provided that the adjustment would result a change of at least 1% in the then effective conversion rate. During the year ended December 31, 2017, the conversion rate increased to 35.8997 shares of Class A common stock per \$1,000 principal amount of 2020 Notes. The conversion rate will not be adjusted for any accrued and unpaid interest. The 2020 Notes are not redeemable prior to maturity.

The 2020 Notes are guaranteed on a senior unsecured basis by a subsidiary of the Company and are general unsecured obligations of the Company. The obligations rank senior in rights of payment to the Company's subordinated debt, equal in right of payment to the Company's unsubordinated debt and effectively junior in right of payment to any of the Company's secured indebtedness to the extent of the value of the assets securing such indebtedness.

The following table presents a summary of the equity and liability components of the 2020 Notes (in millions):

December
31,
2018 2017

Principal \$225 \$225

Less:

Unamortized debt discount (8) (13)
Unamortized financing costs (2) (3)
Carrying value of convertible senior notes \$215 \$209

Carrying value of the equity component (1) \$24 \$24

(1) Included in the consolidated balance sheets as additional paid-in capital, net of \$1 million in equity issuance costs.

Commitments and Contingencies

Operating Leases (in millions)

2019 2020 2021 2022 2023 Thereafter Total

Operating leases \$ 7 \$ 7 \$ 8 \$ 7 \$ 8 \$ 30 \$ 67

The Company has entered into lease agreements for office facilities in Houston, Texas and San Francisco, California. The Houston, Texas lease expires in April 2027. In March 2018, the Company entered into an operating lease for its new corporate headquarters in San Francisco, California. Total operating lease payments are approximately \$35 million over the term of the lease which expires in December 2028.

Item 16. Form 10-K Summary

None.