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

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2019.

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 incorporation or organization)	**(I.R.S. Employer 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	Trading symbol	Name of each exchange on which registered
Class A common stock	PEGI	Nasdaq Global Select Market
		Toronto Stock Exchange

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 ☒ 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 ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an 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 ☒

As of July 31, 2019, there were 98,240,715 shares of Class A common stock outstanding with par value of $0.01 per share.

PATTERN ENERGY GROUP INC.
REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2019
TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

PART II. OTHER INFORMATION

CAUTIONARY NOTICE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements and information in this Quarterly Report on Form 10-Q (Form 10-Q) 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 actual results to differ materially from those in the forward-looking statements include, but are not limited to, those summarized below:

- 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 our 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.”

For additional information regarding known material factors that could cause our actual results to differ from our projected results, please see Part II, "Item 1A. Risk Factors" in this Form 10-Q and Part I, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018.

Readers are cautioned to not 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.

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-Q 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;
- “Belle River” refers to SP Belle River Wind LP, a wind project located in Lakeshore, 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;
- “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;
- “Grady” refers to Grady Wind Energy Center, LLC, a wind project located in Curry County, New Mexico;
- “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 2. Management's Discussion and Analysis of Financial Condition and Results of Operations;
- “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;
- “North Kent” refers to North Kent Wind 1 LP, a wind project located in Chatham-Kent, Ontario, Canada;
- “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, Belle River, Grand, K2 (which we disposed of on December 31, 2018), North Kent, 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 us 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. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

Pattern Energy Group Inc.
Consolidated Balance Sheets
(In millions of U.S. dollars, except share and par value data)
(Unaudited)

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents (Note 7)	$ 124	$ 101
Restricted cash (Note 7)	—	4
Counterparty collateral	1	6
Trade receivables (Note 7)	68	50
Derivative assets, current	3	14
Prepaid expenses (Note 7)	13	18
Deferred financing costs, current, net of accumulated amortization of $4 and $3 as of June 30, 2019 and December 31, 2018, respectively	2	2
Other current assets (Note 7)	29	16
Total current assets	240	211
Restricted cash (Note 7)	12	18
Major construction advances	40	84
Construction in progress	415	259
Property, plant and equipment, net (Note 7)	4,002	4,119
Unconsolidated investments	246	270
Derivative assets	6	9
Deferred financing costs	8	8
Net deferred tax assets	11	5
Intangible assets, net (Note 7)	215	219
Goodwill	60	58
Other assets (Note 7)	116	34
Total assets	$ 5,371	$ 5,294
Liabilities and equity		
Current liabilities:		
Accounts payable and other accrued liabilities (Note 7)	$ 54	$ 67
Accrued construction costs (Note 7)	63	27
Counterparty collateral liability	1	6
Accrued interest (Note 7)	14	14
Dividends payable	42	42
Derivative liabilities, current	5	2
Revolving credit facility, current	269	198
Current portion of long-term debt, net	61	56
Asset retirement obligation, current	24	24
Contingent liabilities, current	118	31
Other current liabilities (Note 7)	21	11
Total current liabilities	672	478
Revolving credit facility	25	25
Long-term debt, net	2,084	2,004
Derivative liabilities	71	31
Net deferred tax liabilities	123	117
Intangible liabilities, net (Note 7)	46	56
Contingent liabilities (Note 7)	37	142
Asset retirement obligations (Note 7)	206	185
Other long-term liabilities (Note 7)	130	71
Contract liability	27	26
Total liabilities	3,421	3,135
Commitments and contingencies (Note 16)		

Equity:				
Class A common stock, $0.01 par value per share: 500,000,000 shares authorized; 98,240,715 and 98,051,629 shares outstanding as of June 30, 2019 and December 31, 2018, respectively		1		1
Additional paid-in capital		1,050		1,130
Accumulated loss		(64)		(27)
Accumulated other comprehensive loss		(87)		(52)
Treasury stock, at cost; 249,481 and 223,040 shares of Class A common stock as of June 30, 2019 and December 31, 2018, respectively		(5)		(5)
Total equity before noncontrolling interest		895		1,047
Noncontrolling interest		1,055		1,112
Total equity		1,950		2,159
Total liabilities and equity	$	5,371	$	5,294

See accompanying notes to consolidated financial statements.

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

	Three months ended June 30,		Six months ended June 30,	
	2019	**2018**	**2019**	**2018**
Revenue:				
Electricity sales	$ 135	$ 136	$ 258	$ 238
Other revenue	5	4	17	14
Total revenue	140	140	275	252
Cost of revenue:				
Project expense	40	34	80	69
Transmission costs	6	8	12	15
Depreciation, amortization and accretion	77	55	160	110
Total cost of revenue	123	97	252	194
Gross profit	17	43	23	58
Operating expenses:				
General and administrative	11	9	22	20
Related party general and administrative	4	4	8	8
Impairment expense	—	4	—	4
Total operating expenses	15	17	30	32
Operating income (loss)	2	26	(7)	26
Other income (expense):				
Interest expense	(25)	(28)	(51)	(53)
Gain (loss) on derivatives	(1)	9	—	14
Earnings (loss) in unconsolidated investments, net	—	(1)	(6)	17
Net loss on transactions	(2)	(2)	(2)	(3)
Other expense, net	—	(2)	(2)	(5)
Total other expense	(28)	(24)	(61)	(30)
Net income (loss) before income tax	(26)	2	(68)	(4)
Income tax provision	4	4	8	11
Net loss	(30)	(2)	(76)	(15)
Net loss attributable to noncontrolling interest	(23)	(35)	(39)	(184)
Net income (loss) attributable to Pattern Energy	$ (7)	$ 33	$ (37)	$ 169
Weighted-average number of common shares outstanding				
Basic	97,609,107	97,459,472	97,588,880	97,444,016
Diluted	97,609,107	97,496,217	97,588,880	105,662,687
Net income (loss) per share attributable to Pattern Energy				
Basic	$ (0.07)	$ 0.34	$ (0.38)	$ 1.73
Diluted	$ (0.07)	$ 0.34	$ (0.38)	$ 1.67

See accompanying notes to consolidated financial statements.

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

	Three months ended June 30,		Six months ended June 30,	
	2019	**2018**	**2019**	**2018**
Net loss	$ (30)	$ (2)	$ (76)	$ (15)
Other comprehensive income (loss):				
Change in foreign currency translation, net of zero tax impact for all periods presented	10	(13)	13	(23)
Cash flow hedge activity:				
Change in unrealized gain (loss) on cash flow hedges, net of tax impact of $4, less than $1, $7 and $1, respectively	(24)	5	(46)	9
Reclassifications to net loss, net of tax impact of less than $1 for all periods presented	1	(1)	1	1
Total change in cash flow hedge activity	(23)	4	(45)	10
Other comprehensive income (loss) related to equity method investee net of tax impact of $1, ($1), $2 and ($1), respectively	(1)	2	(5)	4
Total other comprehensive loss, net of tax	(14)	(7)	(37)	(9)
Comprehensive loss	(44)	(9)	(113)	(24)
Comprehensive loss attributable to noncontrolling interests, net of tax impact of less than $1 for all periods presented	(23)	(36)	(41)	(186)
Comprehensive income (loss) attributable to Pattern Energy	$ (21)	$ 27	$ (72)	$ 162

See accompanying notes to consolidated financial statements.

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

	Class A Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Total	Noncontrolling Interest	Total Equity
	Shares	Amount	Shares	Amount						
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 equity incentive award plan, net	256,809	—	—	—	—	—	—	—	—	—
Repurchase of shares for employee tax withholding	—	—	(20,097)	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	1	—	—	1	—	1
Dividends declared ($0.422 per Class A common share)	—	—	—	—	(18)	(24)	—	(42)	—	(42)
Acquisitions	—	—	—	—	—	—	—	—	11	11
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(9)	(9)
Net income (loss)	—	—	—	—	—	136	—	136	(149)	(13)
Other comprehensive loss, net of tax	—	—	—	—	—	—	(1)	(1)	(1)	(2)
Balances at March 31, 2018	98,274,669	$ 1	(177,909)	$ (4)	$ 1,218	$ —	$ (27)	$ 1,188	$ 1,106	$ 2,294
Repurchase of shares for employee tax withholding	—	—	(437)	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	1	—	—	1	—	1
Dividends declared ($0.422 per Class A common share)	—	—	—	—	(8)	(33)	—	(41)	—	(41)
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(11)	(11)
Net income (loss)	—	—	—	—	—	33	—	33	(35)	(2)
Other comprehensive loss, net of tax	—	—	—	—	—	—	(6)	(6)	(1)	(7)
Balances at June 30, 2018	98,274,669	$ 1	(178,346)	$ (4)	$ 1,211	$ —	$ (33)	$ 1,175	$ 1,059	$ 2,234

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

	Class A Common Stock		Treasury Stock							
	Shares	Amount	Shares	Amount	Additional Paid-in Capital	Accumulated Income (Loss)	Accumulated Other Comprehensive Income (Loss)	Total	Noncontrolling Interest	Total Equity
Balances at December 31, 2018	98,274,669	$ 1	(223,040)	$ (5)	$ 1,130	$ (27)	$ (52)	$ 1,047	$ 1,112	$ 2,159
Issuance of Class A common stock under equity incentive award plan, net	224,870	—	—	—	—	—	—	—	—	—
Repurchase of shares for employee tax withholding	—	—	(24,955)	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	1	—	—	1	—	1
Dividends declared ($0.422 per Class A common share)	—	—	—	—	(41)	—	—	(41)	—	(41)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	—	5	5
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(11)	(11)
Net loss	—	—	—	—	—	(30)	—	(30)	(16)	(46)
Other comprehensive loss, net of tax	—	—	—	—	—	—	(21)	(21)	(2)	(23)
Balances at March 31, 2019	98,499,539	$ 1	(247,995)	$ (5)	$ 1,090	$ (57)	$ (73)	$ 956	$ 1,088	$ 2,044
Forfeitures of Class A common stock under equity incentive award plan	(9,343)	—	—	—	—	—	—	—	—	—
Repurchase of shares for employee tax withholding	—	—	(1,486)	—	—	—	—	—	—	—
Stock-based compensation	—	—	—	—	1	—	—	1	—	1
Dividends declared ($0.422 per Class A common share)	—	—	—	—	(41)	—	—	(41)	—	(41)
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(10)	(10)
Net loss	—	—	—	—	—	(7)	—	(7)	(23)	(30)
Other comprehensive loss, net of tax	—	—	—	—	—	—	(14)	(14)	—	(14)
Balances at June 30, 2019	98,490,196	$ 1	(249,481)	$ (5)	$ 1,050	$ (64)	$ (87)	$ 895	$ 1,055	$ 1,950

See accompanying notes to consolidated financial statements.

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

	Six months ended June 30,	
	2019	**2018**
Operating activities		
Net loss	$ (76)	$ (15)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation, amortization and accretion	174	125
Impairment expense	—	4
Loss (gain) on derivatives	10	(2)
Stock-based compensation	2	2
Deferred taxes	5	11
(Earnings) losses in unconsolidated investments, net	6	(17)
Distributions from unconsolidated investments	14	33
Changes in operating assets and liabilities:		
Counterparty collateral asset	5	24
Trade receivables	(18)	(10)
Other current assets	(9)	7
Other assets (non-current)	(18)	(2)
Accounts payable and other accrued liabilities	(12)	(12)
Counterparty collateral liability	(5)	(24)
Other current liabilities	(5)	(7)
Contingent liabilities	(1)	(1)
Other long-term liabilities	3	8
Net cash provided by operating activities	75	124
Investing activities		
Cash paid for acquisitions and investments, net of cash and restricted cash acquired	(7)	(215)
Capital expenditures	(63)	(86)
Distributions from unconsolidated investments	12	4
Net cash used in investing activities	(58)	(297)

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

	Six months ended June 30,	
	2019	**2018**
Financing activities		
Dividends paid	(83)	(82)
Capital contributions - noncontrolling interest	5	—
Capital distributions - noncontrolling interest	(21)	(21)
Payment for financing fees	—	(7)
Proceeds from short-term debt	144	333
Repayment of short-term debt	(76)	(133)
Proceeds from long-term debt and other	77	127
Repayment of long-term debt and other	(26)	(35)
Cash paid for contingent consideration	(21)	—
Payment for termination of designated derivatives	(3)	—
Other financing activities	(1)	—
Net cash (used in) provided by financing activities	(5)	182
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1	(2)
Net increase in cash, cash equivalents and restricted cash including cash classified within current assets and liabilities held for sale	13	7
Add: Net decrease in cash classified within current assets and liabilities held for sale	—	(14)
Net change in cash, cash equivalents and restricted cash	13	(7)
Cash, cash equivalents and restricted cash at beginning of period	123	138
Cash, cash equivalents and restricted cash at end of period	$ 136	$ 131
Supplemental disclosures		
Cash payments for income taxes	$ 14	$ —
Cash payments for interest expense	$ 45	$ 49
Schedule of non-cash activities		
Change in property, plant and equipment	$ 71	$ 117

See accompanying 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 transition 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 26 renewable energy projects with an operating capacity that totals approximately 4 gigawatts (GW) which are located in the United States, Canada and Japan.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The consolidated financial statements 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 in consolidation.

Unaudited Interim Financial Information

The accompanying unaudited consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) for interim financial information and Article 10 of Regulation S-X issued by the U.S. Securities and Exchange Commission (SEC). Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. In the opinion of management, the interim financial information reflects all adjustments of a normal recurring nature, necessary for a fair statement of the Company's financial position at June 30, 2019, the results of operations and comprehensive income (loss) for the three and six months ended June 30, 2019 and 2018, respectively, and the cash flows for the six months ended June 30, 2019 and 2018, respectively. The consolidated balance sheet at December 31, 2018 has been derived from the audited financial statements at that date, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. This Form 10-Q should be read in conjunction with the consolidated financial statements and accompanying notes contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

Use of Estimates

The preparation of the 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 these estimates, and such differences may be material to the consolidated financial statements.

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):

	June 30, 2019	December 31, 2018
Cash and cash equivalents	$ 124	$ 101
Restricted cash - current	—	4
Restricted cash	12	18
Cash, cash equivalents and restricted cash shown in the consolidated statements of cash flows	$ 136	$ 123

Leases

The Company determines if an arrangement is a lease at contract inception by evaluating if the contract conveys the right to control the use of an identified asset during the period of use. A right-of-use (ROU) asset represents the Company's right to use an identified asset for the lease term and lease liability represents the Company's obligation to make payments as set forth in the lease arrangement. ROU assets and lease liabilities are included on the Company's consolidated balance sheets beginning January 2019 and are recognized based on the present value of the future lease payments at lease commencement date. The interest rate used to determine the present value of the future lease payments is the Company's incremental borrowing rate, because the interest rate implicit in the lease is generally not readily determinable. A ROU asset initially equals the lease liability, adjusted for any lease payments made prior to lease commencement and any lease incentives. All leases are recorded on the consolidated balance sheets except for leases with an initial term of less than 12 months. All of the Company's leases are operating leases. Lease expense is generally recognized on a straight-line basis over the lease term and is recorded in project expense or general and administrative expense in the consolidated statements of operations.

The Company has lease agreements with lease and non-lease components. Non-lease components primarily include payments for maintenance. The Company combines lease components and non-lease components to account for them together as a single lease component. As such, lease payments represent payments on both lease and non-lease components.

Recently Adopted Accounting Standards

In August 2017, the Financial Accounting Standards Board (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 using a modified retrospective method and recorded an immaterial cumulative effect adjustment to the opening balance of accumulated income (loss) as of January 1, 2019. The adoption did not have a material impact on the Company's consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases* (ASU 2016-02 or ASC 842), as amended by subsequent standards updates, which requires lessees to recognize ROU 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 did not restate comparative periods. The most significant impact of the adoption was the initial recognition of $65 million of ROU assets and $79 million of lease liabilities for operating leases primarily related to corporate offices and land leases in Japan. The difference between the ROU assets and lease liabilities was primarily due to adjustments to the ROU assets to offset a sublease liability and an intangible leasehold interest liability acquired as part of a past business combination. There was no cumulative-effect adjustment for the adoption and the adoption did not have a significant effect on the Company's consolidated statements of operations. The Company elected the practical expedient related to land easements, allowing the Company to carry forward its accounting treatment for land easements on certain existing agreements as its intangible assets. The Company elected to not separate lease and non-lease components and instead treats them as a single lease component. The Company also elected to not record short-term leases with an initial term of 12 months or less on its consolidated balance sheets. Since the Company did not elect the package of practical expedients to carry forward historical lease classification, the Company reassessed its PSAs and land arrangements and determined that all PSAs and the majority of land arrangements were not accounted for as leases under the new standard. The Company further reassessed the PSAs under ASC 815, *Derivatives and Hedging* (ASC 815) and ASC 606, *Revenue from Contracts with Customers* (ASC 606) and determined all PSAs previously accounted for under the previous U.S. GAAP leasing standard, ASC 840, *Leases* (ASC 840) should be accounted for under ASC 606. The reassessment of the PSAs did not have a material impact to the Company's consolidated financial statements. See Note 3, *Revenue* and Note 11, *Leases* for further details.

Recently Issued Accounting Standards

Except for the evaluation of recently adopted accounting standards set forth above and the evaluation of recently issued accounting standards set forth below, there have been no changes to the Company's evaluation of other recently issued accounting standards not yet adopted disclosed in Note 2, *Summary of Significant Accounting Policies,* in the Notes to Consolidated Financial Statements, contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

In April 2019, the FASB issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments-Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments,* that clarifies and improves areas of guidance related to the recently issued standards on credit losses (ASU 2016-13), hedging (ASU 2017-12), and recognition and measurement of financial instruments (ASU 2016-01). The amendments generally have the same effective dates as their related standards. If already adopted, the amendments of ASU 2016-01 and ASU 2016-13 are effective for fiscal years beginning after December 15, 2019 and the amendments of ASU 2017-12 are effective as of the beginning of the Company's next annual reporting period. Early adoption is permitted. As discussed above, the Company adopted ASU 2017-12 on January 1, 2019 and does not expect the amendments of ASU 2019-04 will have a material impact on the its consolidated financial statements. The Company continues to evaluate the impact of ASU 2016-13 and will consider the amendments of ASU 2019-04 as part of that process.

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* (ASU 2018-19). ASU 2018-19 clarifies that receivables from operating leases are accounted for using the lease guidance and not as financial instruments. In May 2019, the FASB issued ASU 2019-05, *Targeted Transition Relief* (ASU 2019-05), which amends Topic 326. ASU 2019-05 provides an option to irrevocably elect to measure certain individual financial assets at fair value instead of amortized cost. ASU 2016-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The Company continues to evaluate the impact of ASU 2016-13 and will consider the amendments of ASU 2019-05 as part of that process.

3. Revenue

The Company sells electricity and RECs under the terms of PSAs or at market prices. The Company generally accounts for PSAs as either derivative instruments pursuant to ASC 815 or contracts with customers pursuant to ASC 606. As a result of the adoption of ASC 842 on January 1, 2019, the Company does not expect future PSAs entered into to meet the definition of a lease. Furthermore, to the extent that PSAs meet the definition of derivatives but qualify for the "normal purchase normal sale" (NPNS) scope exception, as defined in ASC 815, the Company elects NPNS scope exception, as PSAs are generally settled by physical delivery. As such, the Company primarily accounts for its PSAs in accordance with ASC 606.

Prior to January 1, 2019, a majority of the Company's revenues were accounted for under legacy lease guidance, ASC 840. On January 1, 2019, the Company adopted the new accounting standard ASC 842 and reassessed all of its PSAs. As a result of the adoption, all PSAs previously accounted for under ASC 840 are accounted for under ASC 606. As the Company elected the modified retrospective method, the comparative period has not been restated and continues to be presented in accordance with ASC 840.

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 contracts with customers, disaggregated by revenue sources (in millions).

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Revenue from contracts with customers				
Electricity sales				
Electricity sales under PSA [1]	$ 129	$ 17	$ 246	$ 38
Electricity sales to market	3	5	7	7
Stand-alone REC sales	2	3	3	5
Electricity sales from contracts with customers	134	25	256	50
Other revenue				
Related party management service fees	3	3	5	5
Other revenue from contracts with customers	3	3	5	5
Total revenue from contracts with customers	137	28	261	55
Other electricity sales [2]	1	111	2	188
Other revenue	2	1	12	9
Total revenue	$ 140	$ 140	$ 275	$ 252

(1) Includes contracts accounted for under ASC 606 beginning January 1, 2019 as a result of the adoption of ASC 842.

(2) Includes revenue from PSAs accounted for as leases under ASC 840 for prior period and an energy hedge contract accounted for as a derivative under ASC 815.

Electricity Sales from Contracts with Customers

The Company generates revenues primarily by delivering electricity and, where applicable, the associated self-generated RECs to customers under PSAs and market participants. The revenues are primarily determined by the price 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. In bundled PSAs, revenue from the sale of self-generated RECs is recognized when the related electricity is generated and simultaneously delivered even in cases where there is a certification lag as the certification has been deemed to be perfunctory. Since the timing of recognition of revenue for electricity and the associated self-generated RECs is the same and occurs over time, it is unnecessary to allocate transaction price to the two performance obligations. The Company generally 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.

The Company also generates a small fraction of its revenue by delivering RECs on a stand-alone basis. Each promise to deliver stand-alone 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 revenue related to the stand-alone RECs is recognized at the point in time at which control of the energy credits is transferred to customers.

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 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

As of June 30, 2019, revenue expected to be recognized from remaining performance obligations associated with fixed considerations for PSAs, stand-alone RECs and related party management service fees are as follows (in millions):

	Amount
2019 (remainder)	$ 42
2020	73
2021	73
2022	70
2023	68
Thereafter	297
Total	$ 623

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 generally did not record any contract liabilities as it generally 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. However, for one PSA, the Company has a contract liability related to amounts received in advance from the PSA customer for access to the switchyard required in the delivery of electricity. The Company recognized less than $1 million and $1 million as revenue during the three and six months ended June 30, 2019, respectively.

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 MW.

The Company measured impairment expense as the difference between the carrying amount of the net assets and the sales price less estimated costs to sell. As a result, the Company recorded impairment expense of $4 million as of June 30, 2018. On August 20, 2018, the Company completed the Chilean Sale for cash proceeds of $70 million with a total impairment expense of $7 million.

5. Acquisitions

Japan Acquisition

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 2016; (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 $103 million is a current contingent payment as of June 30, 2019. The Company completed the purchase price allocation for the Japan acquisition as of December 31, 2018. Further details were disclosed within the Company's 2018 Annual Report on Form 10-K.

Supplemental Pro Forma Data (unaudited)

Ohorayama commenced operations in March 2018 and until approximately one week before 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 Acquisition as if it had occurred on January 1, 2017 and the actual data reported for the three and six months ended June 30, 2018.

The unaudited pro forma statement of operations data below gives effect to the Japan Acquisition, as if it had occurred on January 1, 2017. The pro forma net loss 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 the acquisition 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.

Unaudited pro forma data (in millions)	Three months ended June 30, 2018	Six months ended June 30, 2018
Pro forma total revenue	$ 140	$ 255
Pro forma total expenses	(142)	(269)
Pro forma net loss	(2)	(14)
Less: pro forma net loss attributable to noncontrolling interest	(34)	(183)
Pro forma net income attributable to Pattern Energy	$ 32	$ 169

6. Property, Plant and Equipment

The following presents the categories within property, plant and equipment (in millions):

	June 30, 2019	December 31, 2018
Operating wind farms	$ 5,014	$ 4,972
Transmission line	94	94
Furniture, fixtures and equipment	18	16
Subtotal	5,126	5,082
Less: accumulated depreciation	(1,124)	(963)
Property, plant and equipment, net	$ 4,002	$ 4,119

The Company recorded depreciation expense related to property, plant and equipment of $75 million and $155 million for the three and six months ended June 30, 2019, respectively, and recorded $54 million and $108 million for the same periods in the prior year, respectively.

7. Variable Interest Entities

The Company consolidates variable interest entities (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, 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 $135 million as of June 30, 2019. 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 June 30, 2019 and December 31, 2018 (in millions). All assets (excluding deferred financing costs, net and intangible assets, net) and liabilities of a 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.

	June 30, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 33	$ 36
Restricted cash	—	4
Trade receivables	19	13
Prepaid expenses	3	6
Other current assets	11	2
Total current assets	66	61
Restricted cash	2	3
Construction in progress	—	1
Property, plant and equipment, net	2,112	2,156
Deferred financing costs, net	2	2
Intangible assets, net	11	12
Other assets	12	12
Total assets	$ 2,205	$ 2,247
Liabilities		
Current liabilities:		
Accounts payable and other accrued liabilities	$ 18	27
Accrued construction costs	—	1
Current portion of long-term debt, net	5	4
Other current liabilities	7	5
Total current liabilities	30	37
Long-term debt, net	152	149
Intangible liability, net	46	48
Asset retirement obligations	58	57
Other long-term liabilities	41	36
Deferred revenue	27	26
Total liabilities	$ 354	$ 353

8. Unconsolidated Investments

The Company's unconsolidated investments consist of the following for the periods presented below (in millions):

	June 30, 2019	December 31, 2018	Percentage of Ownership June 30, 2019	Percentage of Ownership December 31, 2018
South Kent [1]	$ —	$ 5	50%	50%
Grand	2	5	45%	45%
Armow	109	116	50%	50%
Pattern Development	135	144	29%	29%
Unconsolidated investments	$ 246	$ 270		

(1) Refer to "Suspension of Equity Method Accounting" for details.

Pattern Development

Under the Second Amended and Restated Agreement of Limited Partnership of Pattern Development, the Company has the right but not the obligation to contribute up to $300 million to Pattern Development. As of June 30, 2019, the Company has funded $190 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.

Suspension of Equity Method Accounting

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 will: 1) suspend recognition of equity method earnings (losses), 2) record such excess distributions as earnings (loss) in unconsolidated investments, net in the period the distributions occur; and 3) suspend equity in earnings (losses) or equity in other comprehensive income of unconsolidated investments, if applicable.

During the second quarter 2019, the Company's unconsolidated investment in South Kent was in suspension. As of June 30, 2019, the Company's unconsolidated investment for South Kent was zero. In accordance with ASC 323, Investments - Equity Method and Joint Ventures, the Company suspended recognition of South Kent's equity method earnings until such time when South Kent's cumulative equity method earnings exceeds cumulative distributions received and cumulative equity method earnings (losses). As the Company has no explicit or implicit commitment to fund losses at the unconsolidated investments, the Company recorded distributions received in excess of the carrying amount of its unconsolidated investments as gains. For the three and six months ended June 30, 2019, earnings in unconsolidated investments, net as reported on the consolidated statements of operations attributable to South Kent included $5 million in distributions received in excess of the carrying amount of the Company's investment.

During the suspension period, the Company maintains a memo ledger that records the components of the suspended activity. As of June 30, 2019, the memo ledger balance was made up of distributions received of $5 million in excess of the carrying amount of the Company's unconsolidated investment in South Kent and earnings of $3 million in excess of the carrying amount.

Basis Amortization of Unconsolidated Investments

The cost of the Company’s investment in the net assets of unconsolidated investments was higher than the fair value of the Company’s equity interest in the underlying net assets of its unconsolidated investments. The basis differences 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 three and six months ended June 30, 2019, the Company recorded basis difference amortization for its unconsolidated investments of $2 million and $3 million, respectively, and for the same periods in 2018, the Company recorded basis difference amortization of $3 million and $5 million, respectively, in earnings (loss) in unconsolidated investments, net on the consolidated statements of operations.

Summarized Financial Data for Equity Method Investees

The following table presents summarized statements of operations information for the three and six months ended June 30, 2019 and 2018 for the Company's equity method investees (in millions):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Revenue	$ 94	$ 70	$ 161	$ 180
Cost of revenue	50	30	68	60
Operating expenses	32	35	80	54
Other expense	21	18	51	40
Net income (loss)	$ (9)	$ (13)	$ (38)	$ 26

9. Debt

The Company's debt consists of the following for periods presented below (in millions):

	June 30, 2019	December 31, 2018	As of June 30, 2019 Contractual Interest Rate	As of June 30, 2019 Effective Interest Rate	As of June 30, 2019 Maturity
Corporate-level					
Corporate Revolving Credit Facility	$ 269	$ 198	Varies [1]	4.03% [1]	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					
Santa Isabel term loan	99	100	4.57%	4.57%	September 2033
Mont Sainte Marguerite-med term loan	61	62	3.97%	3.97%	December 2029
Mont Sainte Marguerite-long term loan	97	93	5.04%	5.04%	June 2042
Variable interest rate					
Japan Credit Facility	25	25	Varies [5]	1.82%	August 2022
Ocotillo commercial term loan	277	281	3.83%	4.05% [3]	June 2033
St. Joseph term loan [2]	154	152	3.72%	4.08% [3]	November 2033
Western Interconnect term loan	52	52	3.70%	4.21% [3]	May 2034
Meikle term loan [2]	244	239	3.48%	3.94% [3]	May 2024
Futtsu term loan	74	75	1.07%	1.86% [3]	December 2033
Ohorayama term loan	92	93	0.87%	1.50% [3]	February 2036
Tsugaru Construction Loan	213	131	0.72%	0.72%	March 2038
Tsugaru Holdings Loan Agreement	61	59	3.13%	3.13%	July 2022
Imputed interest rate					
Hatchet Ridge financing lease obligation	174	180	1.43%	1.43%	December 2032
	2,467	2,315			
Unamortized discount, net [4]	(9)	(11)			
Unamortized financing costs	(19)	(21)			
Total debt, net	2,439	2,283			

As reflected on the consolidated balance sheets	June 30, 2019	December 31, 2018
Revolving credit facility, current	$ 269	$ 198
Revolving credit facility	25	25
Current portion of long-term debt, net of financing costs	61	56
Long term debt, net of financing costs	2,084	2,004
Total debt, net	$ 2,439	$ 2,283

(1) Refer to Corporate Revolving Credit Facility in the Annual Report on Form 10-K for the year ended December 31, 2018 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 10, *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.

Interest and commitment fees incurred and interest expense for debt consisted of the following (in millions):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Corporate-level interest and commitment fees incurred	$ 11	$ 10	$ 22	$ 18
Project-level interest and commitment fees incurred	13	17	27	31
Capitalized interest, commitment fees, and letter of credit fees	(2)	(1)	(3)	(1)
Amortization of debt discount/premium, net	2	1	3	2
Amortization of financing costs	1	1	2	3
Interest expense	$ 25	$ 28	$ 51	$ 53

Corporate Level Debt

Corporate Revolving Credit Facility

On November 21, 2017, certain of the Company's subsidiaries have 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. 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 the Company's holding company subsidiaries, in addition to other customary collateral.

As of June 30, 2019, $117 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 June 30, 2019, the Company's holding company subsidiaries were in compliance with covenants contained in the Revolving Credit Facility.

As of June 30, 2019 and December 31, 2018, letters of credit of $54 million and $45 million, respectively, were 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 (Convertible Senior Notes or 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. The following table presents a summary of the equity and liability components of the 2020 Notes (in millions):

	June 30, 2019	December 31, 2018
Principal	$ 225	$ 225
Less:		
Unamortized debt discount	(6)	(8)
Unamortized financing costs	(1)	(2)
Carrying value of convertible senior notes	$ 218	$ 215
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

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 $33 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 June 30, 2019, $8 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 June 30, 2019, outstanding borrowings under the Tsugaru Construction Loan totaled $213 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 June 30, 2019, outstanding borrowings under the Tsugaru Holdings Loan Agreement totaled $61 million.

10. 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 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 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 June 30, 2019, the Company also 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):

	June 30, 2019			
	Derivative Assets		Derivative Liabilities	
	Current	Long-Term	Current	Long-Term
Fair Value of Designated Derivatives				
Interest rate swaps	$ —	$ —	$ 5	$ 70
Fair Value of Undesignated Derivatives				
Foreign currency forward contracts	3	6	—	1
Congestion revenue rights [(1)]	—	—	—	—
Total Fair Value	$ 3	$ 6	$ 5	$ 71

	December 31, 2018			
	Derivative Assets		Derivative Liabilities	
	Current	Long-Term	Current	Long-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

(1) As of June 30, 2019, the fair value was less than $1 million.

The following table summarizes the notional amounts of the Company's outstanding derivative instruments (in millions except for MWh):

	Unit of Measure		June 30, 2019		December 31, 2018
Designated Derivative Instruments					
Interest rate swaps	USD	$	354	$	319
Interest rate swaps	CAD	$	710	$	721
Interest rate swaps	JPY	¥	55,077	¥	55,675
Undesignated Derivative Instruments					
Interest rate swaps	USD	$	—	$	138
Energy derivative	MWh		—		193,252
Foreign currency forward contracts	CAD	$	93	$	106
Foreign currency forward contracts	JPY	¥	10,925	¥	11,589
Congestion revenue rights	MWh		232		505

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 cash settlement occurs. The designated interest rate swaps have remaining maturities ranging from approximately 4.5 years to 23.8 years as of June 30, 2019.

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):

		Three months ended June 30,				Six months ended June 30,			
	Description		2019		2018		2019		2018
Gains (losses) recognized in accumulated OCI	Change in fair value [1]	$	(28)	$	5	$	(53)	$	8
Gains (losses) reclassified from accumulated OCI into:									
Interest expense	Derivative settlements	$	(1)	$	(1)	$	(1)	$	(3)
Gain on derivatives	De-designation of derivatives		—		2	$	—	$	2
Gain recognized in interest expense	Ineffective portion [2]	$	—	$	—	$	—	$	1

(1) For 2018, the amount represents effective portion only as the Company adopted ASU 2017-12 on January 1, 2019.

(2) Applies to 2018 only as a result of the adoption of ASU 2017-12 on January 1, 2019.

The Company estimates that $6 million in accumulated other 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):

		Three months ended June 30,		Six months ended June 30,	
Derivative Type	**Financial Statement Line Item**	**2019**	**2018**	**2019**	**2018**
Interest rate derivatives	Gain (loss) on derivatives	$ —	$ 2	$ (1)	$ 4
Energy derivative	Electricity sales	$ —	$ 1	$ —	$ (4)
Foreign currency forward contracts	Gain (loss) on derivatives	$ (1)	$ 7	$ 1	$ 11

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 gain (loss) on derivatives in the consolidated statements of operations as these hedges are not accounted for under hedge accounting. As of June 30, 2019, the Company terminated all of its undesignated interest rate swaps.

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 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. The energy derivative expired in April 2019. As a result of the counterparty's credit rating downgrade, the Company received collateral related to the energy derivative agreement. As of June 30, 2019, the Company returned the counterparty's collateral.

In May 2019, the Company secured a short-term derivative instrument to continue to manage its exposure to variable electricity prices at Gulf Wind that will expire on September 30, 2019. The short-term derivative instrument qualified for the NPNS scope exception and is accounted for under ASC 606.

Foreign Currency Forward 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 10.8 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.

11. Leases

The Company has operating leases for corporate offices, lands for its wind and solar facilities, and certain equipment. The leases have remaining lease terms of 5 months to 19 years, some of which may include renewal and extension options. Generally, these options do not impact the lease term because the Company is not reasonably certain that it will exercise the options.

The Company subleases its former headquarters to a third-party. As the Company remains the primary obligor under the original lease, which expires in 2026, the Company continues to account for the lease as an operating lease. Sublease income is recognized on a straight-line basis over the remaining life of the sublease. As of June 30, 2019, future sublease proceeds under the sublease agreement are approximately $1 million for the remaining six months of 2019 and $2 million per year for 2020 through 2026.

Supplemental balance sheet information related to leases are as follows (in millions):

Operating leases	**Balance sheet location**		**June 30, 2019**
Operating lease right-of-use assets	Other assets	$	64
Operating lease liabilities, current	Other current liabilities		(10)
Operating lease liabilities	Other long-term liabilities		(69)
Total operating lease liabilities		$	(79)

As of June 30, 2019, maturities of operating lease liabilities were as follows (in millions):

Remainder of 2019		5
2020		9
2021		9
2022		9
2023		9
Thereafter		51
Total lease payment	$	92
Less imputed interest		(13)
Total	$	79

The components of lease expense are as follows (in millions):

		Three months ended June 30, 2019		**Six months ended June 30, 2019**
Operating lease cost	$	2	$	4
Sublease income		(1)		(1)
Total lease cost	$	1	$	3

Supplemental cash flow and other information related to the Company's operating leases are as follows (in millions, except for lease term and discount rate):

		Six months ended June 30, 2019
Operating cash flows from operating leases [1]	$	(4)
Weighted average remaining lease term (years):		11.2
Weighted average discount rate [2]:		3.24%

(1) Represents cash paid for amounts included in the measurement of lease liabilities.

(2) When an implicit rate is not readily determinable, the interest rate used to determine the present value of the future lease payments is the Company's incremental borrowing rate.

As of June 30, 2019, the Company does not have any significant leases that have not yet commenced.

As of December 31, 2018, estimated future commitments related to operating leases and land agreements were as follows (in millions):

2019	$	22
2020		21
2021		22
2022		21
2023		22
Thereafter		352
Total	$	460

These amounts include certain land agreements not accounted for as leases under ASC 842, which are excluded from the lessee's maturity analysis presented above.

12. Accumulated Other Comprehensive Loss

The following tables summarize the changes in the accumulated other comprehensive loss balance, net of tax, by component (in millions):

	Foreign Currency	Effective Portion of Change in Fair Value of Derivatives	Proportionate Share of Equity Investee's OCI	Total
Balances at December 31, 2017	$ (28)	$ (4)	$ 7	$ (25)
Other comprehensive income (loss) before reclassifications	(23)	9	1	(13)
Amounts reclassified from accumulated other comprehensive loss	—	1	3	4
Net current period other comprehensive income (loss)	(23)	10	4	(9)
Balances at June 30, 2018	$ (51)	$ 6	$ 11	$ (34)

	Foreign Currency	Effective Portion of Change in Fair Value of Derivatives	Proportionate Share of Equity Investee's OCI	Total
Balances at December 31, 2018	$ (65)	$ (4)	$ 9	$ (60)
Other comprehensive income (loss) before reclassifications	13	(46)	(7)	(40)
Amounts reclassified from accumulated other comprehensive loss	—	1	2	3
Net current period other comprehensive income (loss)	13	(45)	(5)	(37)
Balances at June 30, 2019	$ (52)	$ (49)	$ 4	$ (97)

13. Fair Value Measurements

Fair Value

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 valuation 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):

	June 30, 2019			
	Level 1	Level 2	Level 3	Total
Assets				
Foreign currency forward contracts	$ —	$ 9	$ —	$ 9
Congestion revenue rights [(1)]	—	—	—	—
	$ —	$ 9	$ —	$ 9
Liabilities				
Interest rate swaps	$ —	$ 75	$ —	$ 75
Foreign currency forward contracts	—	1	—	1
Contingent consideration	—	—	111	111
	$ —	$ 76	$ 111	$ 187

(1) As of June 30, 2019, the fair value was less than $1 million.

	December 31, 2018			
	Level 1	Level 2	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

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 future electricity price curves 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 instrument measured at fair value on a recurring basis using significant unobservable inputs (in millions):

	Three months ended June 30,		Six months ended June 30,	
Energy Derivative	**2019**	**2018**	**2019**	**2018**
Balances, beginning of period	$ 2	$ 16	$ 7	$ 27
Total gain (loss) included in electricity sales	—	1	1	(4)
Settlements	(2)	(5)	(8)	(11)
Balances, end of period	$ —	$ 12	$ —	$ 12

During the three and six months ended June 30, 2019, the Company recognized unrealized losses of $2 million and $7 million, respectively, and $4 million and $15 million for the same periods in 2018, respectively, relating to the energy derivative instrument which were recorded to electricity sales on 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.

The Broadview Project acquisition includes contingent consideration, which requires the Company to make an additional payment upon the commercial operation of Grady, an Identified ROFO Project in New Mexico 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 Grady, adjusted for the estimated production loss incurred by Broadview due to wake effects and transmission losses induced by the operation of Grady. The fair value of the contingent consideration at the acquisition date was $21 million. Pursuant to the Fourth Amendment to the Purchase and Sale Agreement for the Broadview Project acquisition, the Company paid $25 million in contingent consideration in May 2019 to Pattern Energy Group LP.

The estimated fair value of the contingent considerations were 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 represents a Level 3 measurement as defined in ASC 820, *Fair Value Measurement*. As of June 30, 2019, 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 liabilities measured at fair value on a recurring basis using significant unobservable inputs (in millions):

Contingent Consideration Liabilities	Three months ended June 30, 2019	Three months ended June 30, 2018	Six months ended June 30, 2019	Six months ended June 30, 2018
Balances, beginning of period	$ 131	$ 131	130	22
Purchase	—	—	—	106
Total (gain) loss included in other income (expense), net	5	(3)	6	—
Settlement	(25)	—	(25)	—
Balances, end of period	$ 111	$ 128	$ 111	$ 128

During the three and six months ended June 30, 2019, the Company recognized unrealized losses of $5 million and $6 million, respectively, and unrealized gains of $3 million and less than $1 million for the same periods in 2018, respectively, relating to contingent liabilities which was recorded to other expense, net on the consolidated statements of operations.

The valuation techniques and significant unobservable inputs used in material recurring Level 3 fair value measurements were as follows (in millions, for fair value):

June 30, 2019	Fair Value	Valuation Technique	Significant Unobservable Inputs	Range
Tsugaru contingent consideration	$111	Discounted cash flow	Deferred purchase price	$109 - $128 million
			Discount rate	6.90%

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)
			Discount rate	2.80%-2.81%
Broadview contingent consideration	$25	Discounted cash flow	Discount rate	4.0%-8.0%
			Annual energy production loss	0.70%
Tsugaru contingent consideration	$105	Discounted cash flow	Deferred purchase price	$109 - $128 million
			Discount rate	6.90%

(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):

	As reflected on the balance sheet	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3	Fair Value Total
June 30, 2019					
Total debt, net	$ 2,439	$ —	$ 2,450	$ —	$ 2,450
December 31, 2018					
Total debt, net	$ 2,283	$ —	$ 2,240	$ —	$ 2,240

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.

14. Stockholders' Equity

Common Stock

The Company has an equity distribution agreement (Equity Distribution Agreement) pursuant to the terms of which, 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, up to an aggregate sales price of $200 million. For the six months ended June 30, 2019, the Company did not sell any shares under the Equity Distribution Agreement. As of June 30, 2019, approximately $144 million in aggregate offering price remained available to be sold under the agreement.

Noncontrolling Interests

The following table presents the balances for noncontrolling interests by project (in millions):

	June 30, 2019	December 31, 2018
Logan's Gap	$ 125	$ 132
Panhandle 1	121	131
Panhandle 2	167	176
Post Rock	105	116
Amazon Wind	96	101
Broadview Project	252	257
Futtsu	10	10
Meikle	47	57
MSM	40	37
Stillwater	92	95
Noncontrolling interest	$ 1,055	$ 1,112

The following table presents the components of total noncontrolling interest as reported in the stockholders' equity statements and the consolidated balance sheets (in millions):

	Capital	Accumulated Loss	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interest
Balances at December 31, 2017	$ 1,380	$ (126)	$ —	$ 1,254
Acquisitions	11	—	—	11
Distributions to noncontrolling interests	(20)	—	—	(20)
Net loss [(1)]	—	(184)	—	(184)
Other comprehensive loss, net of tax	—	—	(2)	(2)
Balances at June 30, 2018	$ 1,371	$ (310)	$ (2)	$ 1,059
Balances at December 31, 2018	$ 1,452	$ (332)	$ (8)	$ 1,112
Contributions from noncontrolling interests	5	—	—	5
Distributions to noncontrolling interests	(21)	—	—	(21)
Net loss	—	(39)	—	(39)
Other comprehensive loss, net of tax	—	—	(2)	(2)
Balances at June 30, 2019	$ 1,436	$ (371)	$ (10)	$ 1,055

(1) On December 22, 2017, the Tax Cuts and Jobs Act (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 one-time reduction in the noncontrolling interest attributable to partners in its tax equity partnerships. As part of the liquidation waterfall, the Company 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 six months ended June 30, 2018, included in net loss attributable to noncontrolling interest is a one-time adjustment of $150 million as a result of the decrease in the federal corporate income tax rate.

Pay-go Contribution

For the Broadview Project, there is 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 investors 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. As a result, the Company received $5 million of Pay-go contribution from the tax equity investors in the first quarter of 2019.

15. Earnings (Loss) Per Share

Basic earnings (loss) per share (EPS) 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 EPS is computed by adjusting basic EPS for the effect of all potential common shares unless they are anti-dilutive. For purpose 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 restricted stock awards (RSAs) and release of deferred restricted stock units (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 EPS, pursuant to the two-class method; however, due to amounts being 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 EPS. 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 EPS because their effect would have been anti-dilutive were 9 million and 9 million shares, respectively, for the three and six months ended June 30, 2019, and 9 million shares and less than 1 million shares, respectively, for the three and six months ended June 30, 2018.

The computations for Class A basic and diluted EPS are as follows (in millions except share data):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Numerator for basic and diluted EPS:				
Net earnings (loss) attributable to controlling interest	$ (7)	$ 33	$ (37)	$ 169
Numerator for basic EPS - net income (loss) attributable to common stockholders	$ (7)	$ 33	$ (37)	$ 169
Add back convertible senior notes interest	—	—	—	7
Numerator for diluted EPS - net income (loss) attributable to common stockholders	$ (7)	$ 33	$ (37)	$ 176
Denominator for EPS:				
Weighted average number of shares:				
Class A common stock - basic	97,609,107	97,459,472	97,588,880	97,444,016
Add dilutive effect of:				
Restricted stock awards	—	36,348	—	47,886
Restricted stock units	—	397	—	45
Convertible senior notes	—	—	—	8,170,740
Class A common stock - diluted	97,609,107	97,496,217	97,588,880	105,662,687
EPS:				
Class A common stock:				
Basic	$ (0.07)	$ 0.34	$ (0.38)	$ 1.73
Diluted	$ (0.07)	$ 0.34	$ (0.38)	$ 1.67
Dividends declared per Class A common share	$ 0.42	$ 0.42	$ 0.84	$ 0.84

16. Commitments and Contingencies

Land Agreements Not Accounted for under ASC 842

The Company has entered into various long-term land agreements for its wind and solar farms that are not accounted for under ASC 842, primarily in the U.S. and Canada, because the agreements do not convey the right to control the use of the land. In these agreements, the Company does not have exclusive use of the land and the landowners retain the rights to the economic benefits for most of the land. For the three and six months ended June 30, 2019, the Company recorded rent expenses of $4 million and $8 million, respectively, and $5 million and $9 million for the same periods in 2018, respectively, in project expense in its consolidated statements of operations.

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 June 30, 2019, irrevocable letters of credits totaling $153 million were available to be issued to guarantee the Company's performance for the duration of the agreements.

Project Finance and Other Agreements

The Company has various project finance and other agreements which obligate the Company to provide certain reserves to enhance its credit worthiness and facilitate the availability of credit. As of June 30, 2019, irrevocable letters of credit totaling $161 million, which includes letters of credit available under the Revolving Credit Facility, were available to be issued to ensure performance under the various project finance and other 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 June 30, 2019, the Company recorded liabilities of $2 million associated with bonuses payable to the turbine manufacturers and service providers.

Contingencies in connection with the Broadview Project

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 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 Grady. The contingent payment is calculated as a percentage of additional transmission revenue earned by Western Interconnect upon Grady's commercial operation, which is expected to occur in late 2019.

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 June 30, 2019, the Company has recorded a contingent liability of $4 million associated with the indemnity.

Contingencies in connection with Hatchet Ridge

On January 29, 2019, Pacific Gas and Electric Company (PG&E) filed voluntary petitions for relief under Chapter 11 of the United States Bankruptcy Code in the United States Bankruptcy Court for the Northern District of California ("the Bankruptcy Court"). The Company has received all post-petition invoiced amounts through June 2019. However, the pre-petition amount of $2 million that relates to production prior to the Chapter 11 filing date remained outstanding as of June 30, 2019 and will be addressed as part of Chapter 11 process. The Company determined that it is probable that substantially all of the consideration to which the entity will be entitled for the electricity delivered to PG&E will be collected; therefore, the Company continues to account for the PSA under ASC 606. The Company evaluated the pre-petition amount of $2 million for impairment in accordance with ASC 450, *Contingencies.* The Company concluded that it is reasonably possible that Hatchet Ridge's pre-petition amount may be impaired; however, the Company did not recognize any amount for impairment for the six months ended June 30, 2019. The Company will continue to monitor the bankruptcy proceedings and reassess the pre-petition amount for impairment.

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 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.

17. 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 incurs a fee for such services under agreements with a subsidiary of Pattern Development.

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. The MSA costs incurred by the Company are included in related party general and administrative 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):

	June 30, 2019	December 31, 2018
Other current assets	$ 19	$ 7
Total due from related parties	$ 19	$ 7
Other current liabilities	9	9
Contingent liabilities, current	111	25
Contingent liabilities	—	105
Total due to related parties	$ 120	$ 139

The table below presents 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):

		Three months ended June 30,		Six months ended June 30,	
Related Party Agreement	Financial Statement Line Item	2019	2018	2019	2018
Management fees	Other revenue	$ 3	$ 3	$ 5	$ 5
MSA reimbursement	General and administrative	$ 3	$ 3	$ 5	$ 5
MSA costs	Related party general and administrative	$ (4)	$ (4)	$ (8)	$ (8)

Purchase and Sales Agreements

During the six months ended June 30, 2019 and 2018, the Company consummated the following acquisitions with Pattern Energy Group LP, which are further detailed in Note 5, *Acquisitions* (in millions):

Acquisitions from Pattern Development Companies	Date of Acquisition	Cash consideration net of acquired cash	Debt Assumed	Contingent Consideration
Japan projects	March 7, 2018	$ 158	$ 181	$ 106

Investment in Pattern Development

During 2019, the Company funded $7 million into Pattern Development. As of June 30, 2019, the Company has funded $190 million in aggregate and holds an approximately 29% ownership interest in Pattern Development.

ERP Purchase from Pattern Energy Group LP

On March 26, 2019, the Company entered into an Intellectual Property Rights Purchase and Transfer Agreement with Pattern Energy Group LP, pursuant to which the Company acquired certain intellectual property assets which comprise the enterprise resource planning system and associated integrated platforms developed by Pattern Energy Group LP, on a third-party software platform for a purchase price of $13 million. In addition, the Company intends to bill both Pattern Energy Group LP and Pattern Development for their usage under the MSA.

18. 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.

Segment information for the three and six months ended June 30, 2019 and 2018, respectively, is presented in the table below (in millions):

For the Three Months Ended June 30, 2019	Operating Business	Development Investment [1]	Corporate, Other and Eliminations	Reconciling Amounts [2]	Consolidated
Total revenue	$ 138	$ 13	$ 2	$ (13)	$ 140
Depreciation, amortization and accretion	$ 76	$ —	$ 1	$ —	$ 77
Impairment expense	$ —	$ —	$ —	$ —	$ —
Operating income (loss)	$ 14	$ (6)	$ (12)	$ 6	$ 2
Earnings (loss) in unconsolidated investments [3]	$ 5	$ —	$ (5)	$ —	$ —
Interest expense	$ 13	$ —	$ 12	$ —	$ 25
Income tax provision	$ 2	$ —	$ 2	$ —	$ 4
Net income (loss)	$ 3	$ (6)	$ (33)	$ 6	$ (30)
Adjusted EBITDA	$ 112	$ (5)	$ (10)	$ 5	
Capital expenditures	$ (21)	$ (2)	$ (2)	$ 2	$ (23)
As of June 30, 2019					
Property, plant and equipment, net	$ 3,938	$ 4	$ 64	$ (4)	$ 4,002
Unconsolidated investments	$ 209	$ 9	$ 37	$ (9)	$ 246
Total assets	$ 9,045	$ 200	$ (3,674)	$ (200)	$ 5,371

For the Six Months Ended June 30, 2019	Operating Business	Development Investment [1]	Corporate, Other and Eliminations	Reconciling Amounts [2]	Consolidated
Total revenue	$ 271	$ 13	$ 4	$ (13)	$ 275
Depreciation, amortization and accretion	$ 158	$ 1	$ 2	$ (1)	$ 160
Impairment expense	$ —	$ 2	$ —	$ (2)	$ —
Operating income (loss)	$ 18	$ (20)	$ (25)	$ 20	$ (7)
Earnings (loss) in unconsolidated investments [3]	$ 13	$ —	$ (19)	$ —	$ (6)
Interest expense	$ 27	$ —	$ 24	$ —	$ 51
Income tax provision	$ 4	$ —	$ 4	$ —	$ 8
Net income (loss)	$ (3)	$ (19)	$ (73)	$ 19	$ (76)
Adjusted EBITDA	$ 225	$ (19)	$ (25)	$ 19	
Capital expenditures	$ (60)	$ (2)	$ (3)	$ 2	$ (63)

	For the Three Months Ended June 30, 2018				
	Operating Business	Development Investment (1)	Corporate, Other and Eliminations	Reconciling Amounts (2)	Consolidated
Total revenue	$ 137	$ —	$ 3	$ —	$ 140
Depreciation, amortization and accretion	$ 56	$ —	$ (1)	$ —	$ 55
Impairment expense	$ —	$ —	$ 4	$ —	$ 4
Operating income (loss)	$ 36	$ (8)	$ (10)	$ 8	$ 26
Earnings (loss) in unconsolidated investments (3)	$ 7	$ —	$ (8)	$ —	$ (1)
Interest expense	$ 16	$ —	$ 12	$ —	$ 28
Income tax provision	$ 2	$ —	$ 2	$ —	$ 4
Net income (loss)	$ 23	$ (8)	$ (25)	$ 8	$ (2)
Adjusted EBITDA	$ 115	$ (8)	$ (7)	$ 8	
Capital expenditures	$ (23)	$ (2)	$ (2)	$ 2	$ (25)
As of June 30, 2018					
Property, plant and equipment, net	$ 4,018	$ 1	$ (221)	$ (1)	$ 3,797
Unconsolidated investments	$ 317	$ 6	$ 27	$ (6)	$ 344
Total assets	$ 9,094	$ 103	$ (3,810)	$ (103)	$ 5,284

	For the Six Months Ended June 30, 2018				
	Operating Business	Development Investment (1)	Corporate, Other and Eliminations	Reconciling Amounts (2)	Consolidated
Total revenue	$ 247	$ —	$ 5	$ —	$ 252
Depreciation, amortization and accretion	$ 111	$ —	$ (1)	$ —	$ 110
Impairment expense	$ —	$ —	$ 4	$ —	$ 4
Operating income (loss)	$ 46	$ (12)	$ (20)	$ 12	$ 26
Earnings (loss) in unconsolidated investments (3)	$ 29	$ —	$ (12)	$ —	$ 17
Interest expense	$ 31	$ —	$ 22	$ —	$ 53
Income tax provision	$ 3	$ —	$ 8	$ —	$ 11
Net income (loss)	$ 41	$ (12)	$ (56)	$ 12	$ (15)
Adjusted EBITDA	$ 208	$ (12)	$ 5	$ 12	
Capital expenditures	$ (84)	$ (7)	$ (2)	$ 7	$ (86)

(1) Amounts represent the Company's proportionate share in Pattern Development. The Company's proportionate share of revenue in Pattern Development for each of the three and six months ended June 30, 2019 includes amounts from the sale of a development project to a third-party.

(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 $6 million loss and a $19 million loss for the three and six months ended June 30, 2019, respectively, and an $8 million loss and a $12 million loss for the three and six months ended June 30, 2018, respectively, related to the Company's portion of the loss of Pattern Development.

Reconciliation of segment Adjusted EBITDA to the Company's consolidated net loss is presented as follows (in millions):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Operating Business Adjusted EBITDA	$ 112	$ 115	$ 225	$ 208
Development Investment Adjusted EBITDA	(5)	(8)	(19)	(12)
Corporate, Other and Eliminations Adjusted EBITDA	(10)	(7)	(25)	5
Reconciling Amounts Adjusted EBITDA	5	8	19	12
Less, proportionate share from unconsolidated investments				
Interest expense, net of interest income	(6)	(10)	(12)	(19)
Depreciation, amortization and accretion	(7)	(9)	(13)	(18)
Gain (loss) on derivatives	(4)	1	(12)	3
Unrealized gain (loss) on derivatives	(6)	5	(10)	—
Impairment expense	—	(4)	—	(4)
Adjustments for unconsolidated investments	2	—	2	—
Other	—	1	(2)	(2)
Interest expense, net of interest income	(25)	(27)	(50)	(52)
Depreciation, amortization and accretion	(82)	(63)	(171)	(125)
Net income (loss) before income tax	(26)	2	(68)	(4)
Income tax provision	(4)	(4)	(8)	(11)
Net loss	(30)	(2)	(76)	(15)

19. Subsequent Events

On August 1, 2019, the Company declared a dividend for the third quarter, payable on October 31, 2019, to holders of record on September 27, 2019, in the amount of $0.4220 per Class A share, or $1.688 on an annualized basis. This is unchanged from the second quarter of 2019.

During the third quarter, the Company entered into a series of transactions with Pattern Energy Group LP, including:

- consummation of the purchase of 35 MW of owned capacity in North Kent, a 100 MW project in Chatham-Kent, Ontario, Canada, for $26 million; and
- consummation of the purchase of 22 MW of owned capacity in Belle River, a 100 MW project in Lakeshore, Ontario, Canada, for $18 million.

In July 2019, the Company entered into a $250 million bank loan with a three year maturity. The non-amortizing bank loan will bear interest at LIBOR plus an applicable margin ranging from 117.5 to 142.5 basis points. The Company intends to use the bank loan to fund the acquisition of projects, repayments to the revolving credit facility and other general corporate purposes.

ITEM 2. 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 audited consolidated financial statements and related notes thereto included as part of our Annual Report on Form 10-K for the year ended December 31, 2018 and our unaudited consolidated financial statements and related notes thereto for the three and six months ended June 30, 2019 and other disclosures (including the disclosures under "Part II. Item 1A. Risk Factors") included in this Quarterly Report on Form 10-Q. Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and are presented in U.S. dollars. Unless the context provides otherwise, references herein to "we," "our," "us," "our company" and "Pattern Energy" refer to Pattern Energy Group Inc., a Delaware corporation, together with its consolidated subsidiaries.

Overview

We are a vertically integrated renewable energy company with a mission to transition 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.

Through our operating business segment, we hold ownership interests in 26 renewable energy projects with a total operating portfolio capacity of approximately 4 gigawatts (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 fixed-price PSAs. Approximately 89% 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 June 30, 2019.

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 a more than 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:

- Recent Developments
- Identified ROFO Projects
- Key Performance Metrics
- Consolidated Results of Operations
- Results of Operating Business Segment
- Development Investment Segment
- Results of Development Investment Segment
- Liquidity and Capital Resources
    - Sources of Liquidity
    - Uses of Liquidity
- Critical Accounting Policies and Estimates

Recent Developments

During the third quarter, we entered into a series of transactions with Pattern Energy Group LP, including:

- consummation of the purchase of 35 MW of owned capacity in North Kent, a 100 MW project in Chatham-Kent, Ontario, Canada, for $26 million; and
- consummation of the purchase of 22 MW of owned capacity in Belle River, a 100 MW project in Lakeshore, Ontario, Canada, for $18 million.

In July 2019, we entered into a $250 million bank loan with a three year maturity. The non-amortizing bank loan will bear interest at LIBOR plus an applicable margin ranging from 117.5 to 142.5 basis points. We intend to use the bank loan to fund the acquisition of projects, repayments to the revolving credit facility and other general corporate purposes.

Identified ROFO Projects

We have a ROFO on the pipeline of acquisition opportunities from the Pattern Development Companies. Pattern Development has a pipeline of development projects totaling more than 10 GW. The Identified ROFO list stands at 1.1 GW of total capacity and represents a portion of the pipeline of development projects, which are subject to our ROFO.

Below is a summary of our Identified ROFO Projects that we may acquire from the Pattern Development Companies in connection with our respective purchase rights.

						Capacity (MW)	
Identified ROFO Projects [1]	**Status**	**Location**	**Construction Start** [2]	**Commercial Operations** [3]	**Contract Type**	**Rated** [4]	**Pattern Development Companies Owned** [5]
Pattern Energy Group LP							
Henvey Inlet	In construction	Ontario	2017	2019	PPA	300	150
Pattern Development							
Grady	In construction	New Mexico	2018	2019	PPA	220	188
Sumita	Late stage development	Japan	2020	2022	PPA	100	55
Ishikari	Late stage development	Japan	2020	2022	PPA	112	112
Corona Wind Project(s)	Late stage development	New Mexico	2020	2021	PPA	400	340
						1,132	845

(1) As a result of the recent developments disclosed above under "*Recent Developments*" each of North Kent and Belle River are no longer included on the list of Identified ROFO Projects.

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

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

(4) 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.

(5) 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.

During the second quarter of 2019, we waived our ROFO with respect to a wind project in South Dakota which did not have a PPA and a transmission line project in New Mexico. Such waivers were recommended by the conflicts committee, which is comprised solely of independent directors, for approval by the board of directors and approved by the board of directors. Pattern Development subsequently sold such wind project to a third party and has entered into an agreement to sell such transmission line to a third party.

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.

Adjustments from unconsolidated investments represent distributions received in excess of the carrying amount of our investment and suspended equity earnings or losses, during periods of suspension of recognition of equity method earnings. When we receive distributions in excess of the carrying value of its investment, and we are not liable for the obligations of the investee nor otherwise committed to provide financial support we will: 1) suspend recognition of equity method earnings (losses), 2) record such excess distributions as earnings (loss) in unconsolidated investments, net in the period the distributions occur; and 3) suspend equity in earnings (losses) or equity in other comprehensive income of unconsolidated investments, if applicable.

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 (loss) 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 (loss) 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 current 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, we changed our key metric, cash available for distribution, from a liquidity metric to a performance metric during the fourth quarter of 2018. 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):

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Net loss	$ (30)	$ (2)	$ (76)	$ (15)
Plus:				
Interest expense, net of interest income	25	27	50	52
Income tax provision	4	4	8	11
Depreciation, amortization and accretion	82	63	171	125
EBITDA	$ 81	$ 92	$ 153	$ 173
Unrealized (gain) loss on derivatives	6	(5)	10	—
Impairment expense	—	4	—	4
Adjustments for unconsolidated investments [1]	(2)	—	(2)	—
Other	—	(1)	2	2
Plus, proportionate share from unconsolidated investments:				
Interest expense, net of interest income	6	10	12	19
Depreciation, amortization and accretion	7	9	13	18
(Gain) loss on derivatives	4	(1)	12	(3)
Adjusted EBITDA	$ 102	$ 108	$ 200	$ 213
Plus:				
Distributions from unconsolidated investments	12	18	26	37
Network upgrade reimbursement	—	—	1	1
Release of restricted cash	6	—	6	3
Stock-based compensation	1	1	2	2
Other	1	3	2	4
Less:				
Unconsolidated investment earnings and proportionate shares from EBITDA	(17)	(19)	(32)	(56)
Interest expense, less non-cash items and interest income	(23)	(25)	(46)	(49)
Income taxes	(1)	—	(3)	(3)
Distributions to noncontrolling interests	(9)	(12)	(21)	(21)
Principal payments paid from operating cash flows	(19)	(15)	(30)	(29)
Cash available for distribution	$ 53	$ 59	$ 105	$ 102

(1) Amount consists of gains on distributions from unconsolidated investments and suspended equity earnings of \$5 million and \$3 million for the three months ended June 30, 2019, respectively.

Adjusted EBITDA for the three months ended June 30, 2019 was \$102 million compared to \$108 million for the same period in the prior year, a decrease of \$6 million, or approximately 6%. The decrease in Adjusted EBITDA was primarily due to a \$11 million decrease due to divestitures, a \$3 million decrease in projects fully operational in both periods, partially offset by a \$5 million increase due to new projects acquired and a \$3 million increase in earnings at our development investment segment.

Adjusted EBITDA for the six months ended June 30, 2019 was \$200 million compared to \$213 million for the same period in the prior year, a decrease of \$13 million, or approximately 6%. The decrease in Adjusted EBITDA was primarily due to a \$24 million decrease due to divestitures, \$8 million in losses at our development investment segment, a \$1 million decrease in earnings at projects fully operational in both periods, partially offset by a \$21 million increase in earnings due to new projects acquired.

Cash available for distribution was $53 million for the three months ended June 30, 2019 compared to $59 million for the same period in the prior year. The $6 million decrease was primarily due to a $4 million reduction as a result of divestitures, a $2 million reduction from projects fully operational in both periods, partially offset by $1 million contributed from new projects acquired.

Cash available for distribution was $105 million for the six months ended June 30, 2019 compared to $102 million for the same period in the prior year. The $3 million increase was primarily due to $8 million contributed from new projects acquired and a $6 million increase in contributions from projects fully operational in both periods, partially offset by a $10 million reduction as a result of divestitures.

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 finite-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):

	Three months ended June 30,				Six months ended June 30,			
MWh sold	2019	2018	Change	% Change	2019	2018	Change	% Change
Consolidated MWh sold	2,353,992	2,468,927	(114,935)	(5)%	4,688,062	4,608,411	79,651	1.7 %
Less: noncontrolling MWh	(458,547)	(465,217)	6,670	(1)%	(965,886)	(872,354)	(93,532)	10.7 %
Controlling interest in consolidated MWh	1,895,445	2,003,710	(108,265)	(5)%	3,722,176	3,736,057	(13,881)	(0.4)%
Unconsolidated investments proportional MWh	218,419	259,101	(40,682)	(16)%	507,199	662,469	(155,270)	(23.4)%
Proportional MWh sold	2,113,864	2,262,811	(148,947)	(7)%	4,229,375	4,398,526	(169,151)	(3.8)%

Average realized electricity price per MWh								
Consolidated average realized electricity price per MWh	$ 59	$ 57	$ 2	4 %	$ 59	$ 55	$ 4	7.3 %
Unconsolidated investments proportional average realized electricity price per MWh	$ 113	$ 118	$ (5)	(4)%	$ 113	$ 119	$ (6)	(5.0)%
Proportional average realized electricity price per MWh	$ 70	$ 68	$ 2	3 %	$ 70	$ 68	$ 2	2.9 %

Our consolidated MWh sold for the three months ended June 30, 2019 was 2,353,992 MWh, compared to 2,468,927 MWh for the three months ended June 30, 2018, a decrease of 114,935 MWh, or 5%. The change in consolidated MWh sold was primarily attributable to:

- a decrease of 202,928 MWh at projects fully operational in both periods primarily due to unfavorable wind and availability; and
- a decrease of 69,243 MWh due to divestitures in 2018.

These decreases were partially offset by an increase of 157,236 MWh as a result of new projects acquired in 2018.

Our consolidated MWh sold for the six months ended June 30, 2019 was 4,688,062 MWh, compared to 4,608,411 MWh for the six months ended June 30, 2018, an increase of 79,651 MWh, or 2%. The change in consolidated MWh sold was primarily attributable to:

- an increase in 399,747 MWh as a result of new projects acquired in 2018; and
- an increase of 202,826 MWh due to less curtailment in 2019.

These increases were partially offset by a decrease of 391,732 MWh at projects fully operational in both periods primarily due to unfavorable wind and availability and 131,190 MWh due to divestitures in 2018.

Our proportional MWh sold for the three months ended June 30, 2019 was 2,113,864 MWh, compared to 2,262,811 MWh for the three months ended June 30, 2018, a decrease of 148,947 MWh, or 7%. The change in proportional MWh sold was primarily attributable to:

- a decrease of 143,843 MWh due to unfavorable wind conditions and availability in projects that were fully operational in both periods; and
- a decrease of 109,633 MWh due to divestitures in 2018.

The decreases were partially offset by:

- an increase of 76,040 MWh as a result of acquisitions in 2018; and
- an increase of 28,307 MWh due to less curtailment.

Our proportional MWh sold for the six months ended June 30, 2019 was 4,229,375 MWh, compared to 4,398,526 MWh for the six months ended June 30, 2018, a decrease of 169,151 MWh, or 4%. The change in proportional MWh sold was primarily attributable to:

- a decrease of 275,349 MWh due to unfavorable wind conditions and availability in projects that were fully operational in both periods; and
- a decrease of 249,019 MWh due to divestitures in 2018.

The decreases were partially offset by:

- an increase of 209,998 MWh as a result of acquisitions in 2018; and
- an increase of 145,036 MWh due to less curtailment.

Our consolidated average realized electricity price was $59 per MWh for the three months ended June 30, 2019, compared to $57 per MWh for the three months ended June 30, 2018 due to stronger performance in our higher priced PPAs coupled with lower production in the lower priced ERCOT market.

Our consolidated average realized electricity price was $59 per MWh for the six months ended June 30, 2019, compared to $55 per MWh for the six months ended June 30, 2018 due to stronger performance in our higher priced PPAs.

Our proportional average realized electricity price was $70 per MWh for the three months ended June 30, 2019, compared to $68 per MWh for the three months ended June 30, 2018 due to stronger performance in our higher priced PPAs coupled with lower production in the lower priced ERCOT market.

Our proportional average realized electricity price was $70 per MWh for the six months ended June 30, 2019, compared to $68 per MWh for the six months ended June 30, 2018 due to stronger performance in our higher priced PPAs.

Consolidated Results of Operations

Consolidated net loss

Consolidated net loss is primarily derived from the results of operations of our operating business segment and development investment segment which are further described in their respective sections. Consolidated net loss for the three months ended June 30, 2019 was $30 million compared to net loss of $2 million for the same period in the prior year, an increase of $28 million, or 1,400%. The increase in net loss was primarily attributable to a $20 million increase in net loss at our operating business segment, a $2 million increase in our share of net loss at our development investment segment, and at the corporate level, a $10 million decrease in derivative gains recognized in 2018 due to foreign currency exchange rates and the termination of interest rate swaps, partially offset by increased general and administrative costs.

Consolidated net loss for the six months ended June 30, 2019 was $76 million compared to net loss of $15 million for the same period in the prior year, an increase of $61 million, or 407%. The increase in net loss was primarily attributable to a $44 million increase in net loss at our operating business segment, an $8 million increase in our share of net loss at our development investment segment, and at the corporate level a $12 million decrease in derivative gains recognized in 2018 due to foreign currency exchange rates and the termination of interest rate swaps, partially offset by general and administrative costs.

The financial results by segment discussed below include expenses from transactions among our business segments that are reflected as eliminations or reconciling items in our reconciliation of financial results by segment in Note 18, *Segment Reporting*.

Results of Operating Business Segment

The following table and discussion provide selected financial information of our operating business segment for the periods presented and is unaudited (in millions, except percentages):

	Three months ended June 30,				Six months ended June 30,			
	2019	2018	$ Change	% Change	2019	2018	$ Change	% Change
Total revenue	$ 138	$ 137	$ 1	1 %	$ 271	$ 247	$ 24	10 %
Total cost of revenue	124	101	23	23 %	252	200	52	26 %
Total other expense	9	11	(2)	(18)%	18	3	15	500 %
Net income before income tax	5	25	(20)	(80)%	1	44	(43)	(98)%
Income tax provision	2	2	—	— %	4	3	1	33 %
Net income (loss)	3	23	(20)	(87)%	(3)	41	(44)	(107)%
Net loss attributable to noncontrolling interest	(24)	(35)	11	(31)%	(39)	(184)	145	(79)%
Net income attributable to Pattern Energy	$ 27	$ 58	$ (31)	(53)%	$ 36	$ 225	$ (189)	(84)%

Total revenue

Total revenue for the three months ended June 30, 2019 was $138 million compared to $137 million for the three months ended June 30, 2018, an increase of $1 million, or approximately 1%. The increase was primarily attributable to:

- $8 million from new projects acquired in 2018; and
- $1 million from projects fully operational in both periods, mainly due to an increase in state production tax credits at our Broadview facility, a decrease in loss in unrealized gains on our energy derivative and less curtailment partially offset by decreased availability.

These increases in revenues were offset by an $8 million decrease in revenue due to the divestiture of El Arrayán in 2018.

Total revenue for the six months ended June 30, 2019 was $271 million compared to $247 million for the six months ended June 30, 2018, an increase of $24 million, or approximately 10%. The increase was primarily attributable to:

- $26 million from new projects acquired in 2018; and
- $13 million from projects fully operational in both periods, mainly due to less curtailment and a decrease in unrealized loss on our energy derivative, partially offset by unfavorable wind.

These increases in revenues were offset by a $16 million decrease in revenue due to the divestiture of El Arrayán in 2018.

Cost of revenue

Cost of revenue for the three months ended June 30, 2019 was $124 million compared to $101 million for the three months ended June 30, 2018, an increase of $23 million, or approximately 23%. The increase in cost of revenue is primarily attributable to increased costs at projects fully operational in both periods of $23 million primarily due to accelerated depreciation at our Gulf Wind facility resulting from the repowering of such project and increased costs at new projects of $6 million, partially offset by a decrease in costs of $6 million as a result of the divestiture of El Arrayán.

Cost of revenue for the six months ended June 30, 2019 was $252 million compared to $200 million for the six months ended June 30, 2018, an increase of $52 million, or approximately 26%. The increase in cost of revenue is primarily attributable to $48 million in increased costs at projects fully operational in both periods primarily due to accelerated depreciation at our Gulf Wind facility resulting from the repowering of such project and increased costs at new projects of $16 million, partially offset by a decrease in costs of $13 million as a result of the divestiture of El Arrayán.

Other expense

Other expense for the three months ended June 30, 2019 was $9 million compared to other expense of $11 million for the three months ended June 30, 2018, a decrease of $2 million, or approximately 18%. The change was primarily attributable to a decrease in interest expense as a result of extinguishments of debt and divestitures, partially offset by a decrease in equity earnings for our unconsolidated investments in Canada due to losses in derivatives and decreased earnings from K2.

Other expense for the six months ended June 30, 2019 was $18 million compared to other expense of $3 million for the six months ended June 30, 2018, an increase of $15 million, or approximately 500%. The change was primarily attributable to a $16 million decrease in earnings for our unconsolidated investments in Canada due to losses in derivatives and decreased earnings from K2.

Income tax provision

Tax provision for the three months ended June 30, 2019 was $2 million and remained flat compared to the same period in 2018.

Tax provision for the six months ended June 30, 2019 was $4 million compared to a tax provision of $3 million for the six months ended June 30, 2018, an increase of $1 million, or approximately 33%. The tax provision for the six months ended June 30, 2019 increased primarily due to additional tax provision related to our operations in Japan.

Noncontrolling interest

The net loss attributable to noncontrolling interest was $24 million for the three months ended June 30, 2019 compared to $35 million for the three months ended June 30, 2018. The decreased loss of $11 million was primarily attributable to decreased allocations of losses to tax equity members at our Broadview project.

The net loss attributable to noncontrolling interest was $39 million for the six months ended June 30, 2019 compared to $184 million for the six months ended June 30, 2018. The decreased loss of $145 million was primarily attributable to the one-time adjustment of $150 million in the first quarter of 2018 as a result of the Tax Act, as described in Note 14, *Stockholders' Equity*.

Development Investment Segment

As of June 30, 2019, we have funded approximately $190 million in aggregate and hold an approximate 29% ownership interest in Pattern Development. Our additional investments 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. 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 three and six months ended June 30, 2019 and 2018, our loss in Pattern Development is as follows (in millions):

Loss in Pattern Development	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Pattern Development net loss	$ (19)	$ (34)	$ (66)	$ (53)
Our ownership portion of the net loss	(6)	(8)	(19)	(12)

Results of the Development Investment Segment

The following table and discussion provide selected financial information of our development investment segment for the periods presented and is unaudited (in millions, except percentages):

	Three months ended June 30,				Six months ended June 30,			
	2019 [(1)]	2018 [(1)]	$ Change	% Change	2019 [(1)]	2018 [(1)]	$ Change	% Change
Total revenue	$ 13	$ —	$ 13	— %	$ 13	$ —	$ 13	—%
Total cost of revenue	9	—	9	— %	9	—	9	—%
Development expense	5	4	1	25 %	14	6	8	133%
Operating loss	(6)	(8)	2	(25)%	(20)	(12)	(8)	67%
Net loss	$ (6)	$ (8)	$ 2	(25)%	$ (19)	$ (12)	$ (7)	58%

(1) Amounts represent the Company's proportionate share in Pattern Development.

Our development investment segment has three sources of revenue: sale of energy-generating and transmission projects, services from management and administration, and electricity sales from completed projects before its eventual sale. Our proportionate share of revenue and cost of revenue in Pattern Development for the three and six months ended June 30, 2019, respectively, increased compared to the same period in 2018 due to the sale of a development project to a third-party. There were no electricity sales, and revenue from management and administration services was not material in both periods.

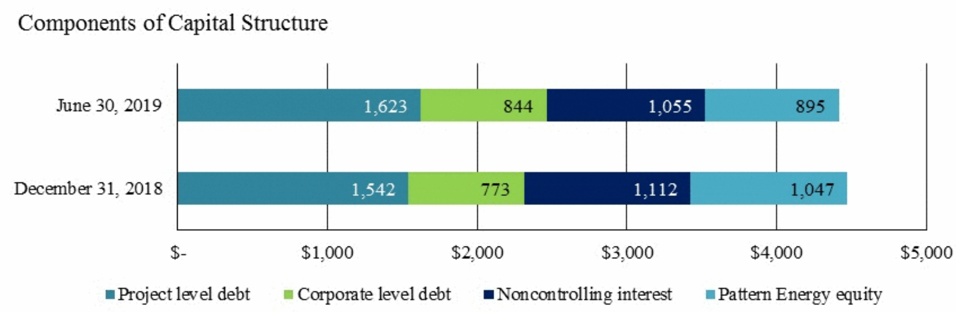
For the three months ended June 30, 2019, our proportionate share of development expense remained relatively flat compared to the same period in 2018. For the six months ended June 30, 2019, our proportionate share of development expense increased 133%, or $8 million, compared to the same period in 2018, primarily due to impairment expense and termination fees.

For the three months ended June 30, 2019, our proportionate share of operating loss decreased 25%, or $2 million, primarily due to sale of a development project to a third-party. For the six months ended June 30, 2019, our proportionate share of operating loss increased 67%, or $8 million, primarily due to an $8 million increase in development expense as discussed above and a $3 million increase in related party administrative expense, partially offset by the sale of a development project to a third-party as discussed above.

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) construction commitments, (viii) unforeseen events and (ix) 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.

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, proceeds from asset sales, borrowings under our corporate and project-level credit agreements, construction financing arrangements 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):

		June 30, 2019
Unrestricted cash	$	124
Restricted cash		12
Revolving credit facilities availability [(1)]		125
Project level facilities:		
Post construction use		157
Construction use		197
Total available liquidity	$	615

(1) As of August 1, 2019, the amount available on our revolving credit facilities is $326 million.

During the third quarter of 2019, we entered into a $250 million non-amortizing bank loan with a three year maturity that incurs interest at LIBOR plus an applicable margin ranging from 117.5 to 142.5 basis points. We used the funds to repay amounts owed under the revolving credit facility and other general corporate purposes and subsequently paid for the acquisitions of Belle River and North Kent. As Henvey Inlet and Grady are nearing completion, we may raise additional capital to fund the potential acquisitions. We believe we will have sufficient liquid assets, cash flows from operations and borrowings available under our revolving credit facilities and construction facilities throughout 2019 to fund capital expenditures, including construction at Tsugaru, announced project acquisitions, capital calls from Pattern Development, debt service obligations and contingencies. With respect to the Gulf Wind repowering, we intend to raise additional non-recourse debt to fund the majority of construction costs. 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 and we may be required to raise additional capital, including project level construction debt, corporate equity, debt or hybrid securities, or sell interests in our projects.

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.

Recent financing transactions

In July 2019, we entered into a $250 million bank loan with a three year maturity. The non-amortizing bank loan will bear interest at LIBOR plus an applicable margin ranging from 117.5 to 142.5 basis points. We intend to use the bank loan to fund the acquisition of projects, repayments to the revolving credit facility and other general corporate purposes.

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 six months ended June 30, 2019, we did not sell any shares under the Equity Distribution Agreement. As of June 30, 2019, 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 (used in) provided by financing activities to evaluate our periodic cash flow results. Below is a summary of our cash flows for each period (in millions):

	Six months ended June 30,	
	2019	**2018**
Net cash provided by operating activities	$ 75	$ 124
Net cash used in investing activities	(58)	(297)
Net cash (used in) provided by financing activities	(5)	182
Effect of exchange rate changes on cash, cash equivalents and restricted cash	1	(2)
Add: Net decrease in cash classified within current assets and liabilities held for sale	—	(14)
Net change in cash, cash equivalents and restricted cash	$ 13	$ (7)

Net cash provided by operating activities

Net cash provided by operating activities was $75 million for the six months ended June 30, 2019 as compared to $124 million in the prior year, a decrease of $49 million, or approximately 40%. The decrease in cash provided by operating activities was primarily due to a $14 million increase in income tax payments, a $16 million increase in other assets (non-current) due to the purchase of the ERP system and a $19 million decrease in distributions from unconsolidated investments.

Net cash used in investing activities

Net cash used in investing activities was $58 million for the six months ended June 30, 2019, which consisted of $63 million in construction costs primarily related to the Tsugaru project in Japan and additional investment of $7 million in Pattern Development, offset by $12 million in distributions from unconsolidated investments.

Net cash used in investing activities was $297 million for the six months ended June 30, 2018, which consisted of $158 million in cash paid, net of cash and restricted cash acquired, for the Japan Acquisition, $86 million primarily for construction costs related to projects acquired in the Japan Acquisition, and an additional investment of $57 million in Pattern Development.

Net cash (used in) provided by financing activities

Net cash used in financing activities for the six months ended June 30, 2019 was $5 million. Net cash provided by financing activities consisted primarily of the following:

- $221 million in proceeds from other long-term debt and the Revolving Credit Facility; and
- $5 million in contributions from noncontrolling interest.

Net cash provided by financing activities was offset by:

- $102 million in repayments of debt and the Revolving Credit Facility;
- $83 million of dividend payments;
- $21 million in distributions to noncontrolling interests; and
- a $21 million payment of contingent consideration.

Net cash provided by financing activities for the six months ended June 30, 2018 was $182 million. Net cash provided by financing activities consisted primarily of the following:

- $127 million in proceeds related to the loans issued at Tsugaru Holdings and Tsugaru subsequent to the acquisition; and
- $333 million in proceeds from other long-term debt and the Revolving Credit Facility.

Net cash provided by financing activities was partially offset by:

- $132 million in repayments of the Revolving Credit Facility;
- $82 million of dividend payments;
- $35 million in repayments and termination of long-term debt;
- $7 million in payments for deferred financing costs primarily associated with the issuance of debt associated with Tsugaru Holdings as described above; and
- $21 million in distributions to noncontrolling interests.

Uses of Liquidity

Cash Dividends to Common Stockholders

We intend to pay regular quarterly dividends in U.S. dollars to holders of our Class A common stock. On August 1, 2019, we declared an unchanged dividend of $0.4220 per share, or $1.688 per share on an annualized basis, to be paid on October 31, 2019 to holders of record on September 27, 2019. The following table sets forth the dividends declared on shares of Class A common stock for the periods indicated.

	Dividends Per Share	Declaration Date	Record Date	Payment Date
2019:				
Third Quarter	$ 0.4220	August 1, 2019	September 27, 2019	October 31, 2019
Second Quarter	$ 0.4220	May 2, 2019	June 28, 2019	July 31, 2019
First Quarter	$ 0.4220	February 22, 2019	March 29, 2019	April 30, 2019

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

Capital Expenditures and Investments

For the six months ended June 30, 2019, total cash used for capital expenditures was $63 million. We do not include capital expenditures at our projects held at our unconsolidated equity investments. Cash paid for capital to Pattern Development was $7 million.

In August 2019, we acquired Belle River and North Kent for an aggregate purchase price of approximately $44 million. See “Recent Developments.” We expect to incur approximately $179 million in the remainder of 2019 related to the construction of Tsugaru and repowering at our Gulf Wind project. We estimate as of June 30, 2019, remaining budget construction cost for Tsugaru and the repower at Gulf Wind are approximately $397 million. In addition, as of June 30, 2019 we estimate a remaining budget for other expansion capital expenditures of $4 million. See *Sources of Liquidity* above for discussion of funding sources for these 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

Material changes in our contractual obligations from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, include the purchase and sale agreements entered into with Pattern Energy Group LP and the entry into the $250 million bank loan as described in "Recent Developments" above.

Off-Balance Sheet Arrangements

As of June 30, 2019, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K.

Credit Agreements for Unconsolidated Investments

Below is a summary of our proportion of debt in unconsolidated investments, as of June 30, 2019 (in millions):

	Total Debt	Percentage of Ownership	Our Portion of Unconsolidated Debt
Armow	$ 361	50%	$ 181
South Kent	433	50%	217
Grand	247	45%	111
Pattern Development	288	29%	84
Unconsolidated investments - debt	$ 1,329		$ 593

Critical Accounting Policies and Estimates

There have been no material changes in our critical accounting policies from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018.

ITEM 3. 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 189,152 MWh of electricity sales during the six months ended June 30, 2019 that were subject to spot market pricing. A hypothetical increase or decrease of 10% or $2.16 per MWh in the merchant market prices would have increased or decreased revenue by less than $1 million for the six months ended June 30, 2019.

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 June 30, 2019, 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 June 30, 2019, the estimated fair value of our debt was $2.5 billion and the carrying value of our debt was $2.4 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 $48 million decrease or $51 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 June 30, 2019, $294 million was outstanding under the revolving credit facilities. A hypothetical increase or decrease in interest rates by 1% would have a $3 million impact to interest expense for the six months ended June 30, 2019.

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. As a result, our interest rate risk is limited to the unhedged portion of the variable rate debt. As of June 30, 2019, the unhedged portion of our variable rate debt was $335 million. A hypothetical increase or decrease in interest rates by 1% would have a $3 million impact to interest expense for the six months ended June 30, 2019.

Foreign Currency Exchange Rate Risk

Our 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 and Japanese Yen. For the six months ended June 30, 2019, our financial results included C$19 million and ¥263 million of net income from our Canadian and Japanese operations, respectively. A hypothetical 10% weakening or strengthening of U.S. dollar would have increased or decreased net earnings of our Canadian and Japanese operations by $2 million for the six months ended June 30, 2019.

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.

As of June 30, 2019, 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 $126 million cumulative translation adjustment in accumulated other comprehensive loss.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (Exchange Act). In designing and evaluating the disclosure controls and procedures, management recognizes that any disclosure controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management necessarily is required to apply its judgment in evaluating the cost-benefit of possible controls and procedures.

Under the supervision and with the participation of management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of June 30, 2019.

Beginning January 1, 2019, we adopted ASU 2016-02. We implemented internal controls covering the evaluation and assessment of leasing contracts related to the adoption. Except as related to the adoption of ASU 2016-02, there have been no changes in our internal control over financial reporting during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Management continuously reviews disclosure controls and procedures, and internal control over financial reporting, and accordingly may, from time to time, make changes aimed at enhancing their effectiveness to ensure that our systems evolve with our business.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are subject, from time to time, to routine legal proceedings and claims arising out of the normal course of business. While the outcome of these legal proceedings and claims cannot be predicted with certainty, 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 1A. RISK FACTORS

There have been no material changes from the risk factors described under the caption "Risk Factors" in the Annual Report on Form 10-K for the year ended December 31, 2018.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(c) Repurchase of Equity Securities

The table below provides information with respect to repurchases of our Class A common stock during the second quarter ended June 30, 2019. All shares were tendered to us in satisfaction of tax withholding obligations upon the vesting of certain director 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 Shares Purchased	Average Price Paid Per Share
April 1, 2019 through April 30, 2019	—	$ —
May 1, 2019 through May 31, 2019	—	$ —
June 1, 2019 through June 30, 2019	1,486	$ 22.99

ITEM 5. OTHER INFORMATION

On June 28, 2019, Kevin J. Deters resigned as Vice President, Engineering and Construction.

ITEM 6. EXHIBITS

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of the Company (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)).
3.2	Amended and Restated Bylaws of the Company (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	Indenture, dated July 28, 2015, among the Company, 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 filed July 28, 2015).
4.3	Indenture, dated as of January 25, 2017, among the Company, 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).
10.1	Letter Agreement dated as of March 4, 2019 between Pattern Western Development LLC and Pattern Gulf Wind Holdings LLC (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 7, 2019).
10.2	Intellectual Property Rights Purchase and Transfer Agreement effective March 26, 2019 between the Company and Pattern Energy Group LP (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 29, 2019).
10.3	Amendment No. 1 to Second Amended and Restated Credit and Guaranty Agreement dated March 5, 2018 (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 5, 2018)
10.4	Amendment No. 2 to Second Amended and Restated Credit and Guaranty Agreement dated July 31, 2019 (Incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated August 6, 2019)
10.5	Purchase and Sale Agreement by and among Pattern Energy Group Inc., Vertuous Energy Trust and Pattern Energy Group LP, dated as of August 2, 2019 (Belle River) (Incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated August 6, 2019)
10.6	Purchase and Sale Agreement by and among Pattern Energy Group Inc. and Pattern Energy Group LP, dated as of August 2, 2019 (North Kent) (Incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated August 6, 2019)
10.7	Amended and Restated Limited Partnership Agreement among Pattern Canada Finance Company ULC, Vertuous Energy Trust and Pattern Belle River GP Holdings Inc. dated as of August 2, 2019 (Incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K dated August 6, 2019)
10.9	Unanimous Shareholders Agreement among Pattern Canada Finance Company ULC, Vertuous Energy Trust and Pattern Belle River GP Holdings Inc. dated as of August 2, 2019 (Incorporated by reference to Exhibit 10.6 to the Company's Current Report on Form 8-K dated August 6, 2019)
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

* This certification accompanies 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.

SIGNATURE

Pursuant to the requirements 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.

	Pattern Energy Group Inc.
Dated: August 6, 2019	By: /s/ Esben W. Pedersen
	Esben W. Pedersen
	Chief Financial Officer
	(On behalf of the Registrant and as Principal Financial Officer)

Exhibit 31.1

Certification of 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

I, Michael M. Garland, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Pattern Energy Group Inc. for the period ended June 30, 2019;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2019

By: /s/ Michael M. Garland
Michael M. Garland
Chief Executive Officer and Director
(Principal Executive Officer)

Exhibit 31.2

Certification of 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

I, Esben W. Pedersen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Pattern Energy Group Inc. for the period ended June 30, 2019;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in the Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2019

By: /s/ Esben W. Pedersen
Esben W. Pedersen
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32

Certification of Chief Executive Officer
Pursuant to 18 U.S.C. Section 1350, As Adopted
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Pattern Energy Group Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2019

By: /s/ Michael M. Garland
Michael M. Garland
Chief Executive Officer
(Principal Executive Officer)

Certification of Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350, As Adopted
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. § 1350, as created by Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Pattern Energy Group Inc. (the "Company") hereby certifies, to such officer's knowledge, that:

(i) the accompanying Quarterly Report on Form 10-Q of the Company for the period ended June 30, 2019 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2019

By: /s/ Esben W. Pedersen
Esben W. Pedersen
Chief Financial Officer
(Principal Financial Officer)