

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Joint Application of)	
PUGET SOUND ENERGY,)	
ALBERTA INVESMENT MANAGEMENT)	
CORPORATION,)	
BRITISH COLUMBIA INVESTMENT)	
MANAGEMENT CORPORATION,)	DOCKET U-180680
OMERS ADMINISTRATION)	
CORPORATION, and OGGM)	
VERMOGENSBEHEER B.V.)	
)	
For an Order Authorizing Proposed Sales of)	
Indirect Interests in Puget Sound Energy.)	
_____)	

EXHIBIT MMH-7

MOODY'S CREDIT OPINION (AUG. 31, 2018)

**ATTACHMENT B to
Joint Applicants' Response to
AWEC Data Request No. 002**



CREDIT OPINION

31 August 2018

Update

Rate this Research

RATINGS

Puget Sound Energy, Inc.

Domicile	Bellevue, Washington, United States
Long Term Rating	Baa1
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Nana Hamilton +1.212.553.9440
AVP-Analyst
nana.hamilton@moodys.com

Jillian Cardona +1.212.553.4351
Associate Analyst
jillian.cardona@moodys.com

Michael G. Haggarty +1.212.553.7172
Associate Managing Director
michael.haggarty@moodys.com

Jim Hempstead +1.212.553.4318
MD-Utilities
james.hempstead@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454

Puget Sound Energy, Inc.

Update following rating affirmation

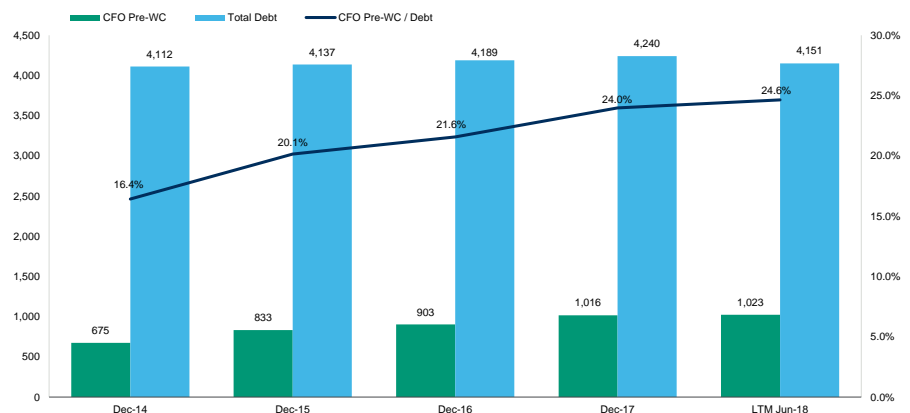
Summary

Puget Sound Energy, Inc's (PSE) credit profile reflects its low risk utility operations, strong financial profile and credit supportive relationship with its primary regulator, the Washington Utilities and Transportation Commission (WUTC).

PSE's credit is constrained by high holding company leverage at its parent, Puget Energy, Inc. (Puget, Baa3 stable).

Exhibit 1

Historical CFO Pre-WC, Total Debt and CFO Pre-WC to Debt



Source: Moody's Financial Metrics

Credit Strengths

- » Supportive regulatory environment provides broad suite of timely recovery mechanisms
- » Strong financial performance
- » Ring-fence type provisions help insulate utility from highly levered parent company

Credit Challenges

- » PSE's dividends are required to service \$1.7 billion of holding company debt
- » Cash flow loss associated with tax reform
- » Significant capital expenditures over the next 12-18 months

Rating Outlook

The stable outlook reflects PSE's credit supportive relationship with the WUTC and its stable and predictable cash flow. The outlook also incorporates our view that the current regulatory relationship in Washington will support its current financial profile, including a ratio of cash flow from operations before changes in working capital (CFO pre-WC) to debt above 20% over the next 12-18 months.

Factors that Could Lead to an Upgrade

- » CFO pre-WC to debt in excess of 25% on a sustainable basis
- » CFO pre-WC less dividends to debt in the mid-to-high teens on a sustainable basis
- » Reduced leverage at the parent holding company

Factors that Could Lead to a Downgrade

- » Less credit supportive regulatory decisions by the WUTC
- » CFO pre-WC to debt below 20%
- » Stranded investments that are not recovered and negatively affect financial metrics

Key Indicators

Exhibit 2

KEY INDICATORS [1]

Puget Sound Energy, Inc.

	Dec-14	Dec-15	Dec-16	Dec-17	LTM Jun-18
CFO Pre-WC + Interest / Interest	3.6x	4.4x	4.8x	5.4x	5.5x
CFO Pre-WC / Debt	16.4%	20.1%	21.6%	24.0%	24.6%
CFO Pre-WC – Dividends / Debt	8.4%	13.5%	15.3%	18.5%	17.8%
Debt / Capitalization	46.2%	45.5%	44.4%	48.5%	47.6%

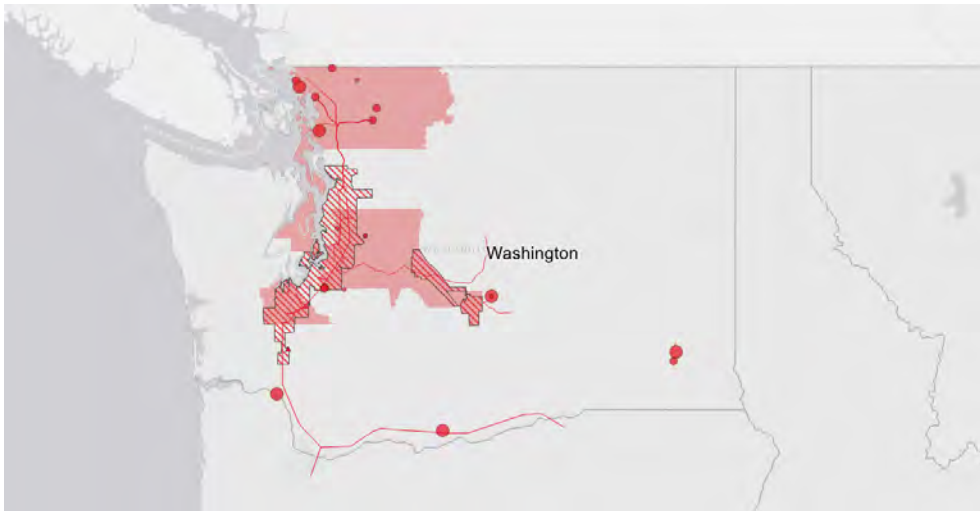
[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations
Source: Moody's Financial Metrics

Profile

Puget Sound Energy, Inc. (PSE), the primary subsidiary of Puget Energy, Inc. (Puget), is an electric and natural gas utility serving about 1.14 million electric and around 826,000 natural gas customers in the State of Washington.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

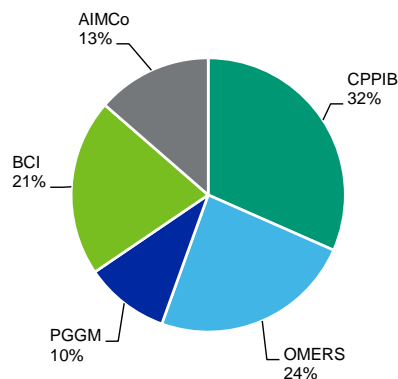
Exhibit 3
Puget's service territory in the Puget Sound Region of Western Washington



Source: S&P Global Market Intelligence

PSE is part of a complex ownership structure following Puget's acquisition in 2009 by Puget Holdings LLC, which is now indirectly owned by a consortium of pension fund investors. In August 2018, Macquarie Infrastructure Partners (MIP) announced the sale of their 44% ownership interests in PSE to existing owners AIMCo and BCI and two new owners: OMERS, the defined benefit pension plan for municipal employees in Ontario, Canada and PGGM, Dutch pension fund manager. Subject to approval by the WUTC, PSE's ownership will consist of Canada Pension Plan Investment Board (CPPIB, 32%), Ontario Municipal Employees Retirement System (OMERS, 24%), British Columbia Investment Management Corporation (BCI, 21%), Alberta Investment Management Corporation (AIMCo, 13%), and PGGM (10%). The exhibit below illustrates the ownership of Puget after the sale of the MIP interests. We view this change in ownership to be credit neutral, as existing owners continue to own the majority of the company and the new owners are long-term holders of infrastructure assets.

Exhibit 4
Puget's new ownership composition



Source: Puget Energy

Detailed credit considerations

Credit supportive regulatory relationship and general rate case outcome provide cost recovery and financial support

PSE maintains a credit supportive relationship with the WUTC, a credit positive since it provides important cost recovery mechanisms for the utility.

In January 2017, PSE filed a general electric and gas rate case with the WUTC requesting a net electric revenue increase of \$86.3 million and a net gas decrease of \$22.3 million based on 9.8% return on equity (ROE) and 48.5% equity capitalization. PSE subsequently filed to update the request in April 2017 to an electric revenue increase of \$67.9 million and gas decrease of \$29.3 million. The WUTC approved a settlement in December 2017 to increase electric revenues by \$20.2 million and decrease gas revenues by \$35.5 million based on a 9.5% ROE and 48.5% equity layer.

PSE's request also included two new mechanisms to help mitigate regulatory lag. The utility requested an expedited rate filing (ERF) mechanism that can be used to update delivery revenues on an expedited basis following a general rate case proceeding. PSE also requested approval to establish an electric cost recovery mechanism (CRM), similar to its existing natural gas CRM, which would allow PSE to obtain accelerated cost recovery on specified electric reliability projects. The WUTC approved PSE's ERF request but rejected the request for an electric CRM.

Importantly, as part of the rate case settlement, the WUTC extended approval of PSE's revenue decoupling mechanism. This is credit supportive since it helps PSE to have greater fixed cost recovery in both its electric and gas segments, even in a declining sales volume environment. The decoupling mechanism was also enhanced to include electric fixed production energy costs.

Furthermore, the approved settlement allowed for the recovery of and return on PSE's Colstrip coal plant balances. For example, PSE will use the regulatory liability for monetized production tax credits (PTC) to fund a Colstrip Community Transition Fund, recover unrecovered plant and recover incurred decommissioning and remediation costs. Colstrip depreciation rates were also increased to allow for the recovery of plant costs in a timely manner.

From 2013 to 2017, PSE operated under a favorable multi-year rate plan which included a series of predetermined annual rate increases, providing a degree of assurance and predictability into PSE's financial performance. As a result of this multi-year plan, PSE was able to substantially reduce regulatory lag, achieving an actual ROE that was less than 1% below its allowed ROE in 2017, relative to an actual ROE approximately 6% lower than its allowed ROE in 2010. Although Puget no longer operates under its previously favorable plan, we still view the utility's relationship with the WUTC as cooperative and expect PSE to continue to work to managing regulatory lag by using ERFs in between general rate cases.

PSE's credit profile is also supported by a suite of other cost recovery mechanisms, including the Electric Conservation Rider, Electric Property Tax Tracker and Purchased Gas Adjustment, among others.

Evolving stakeholder demands and power supply

Several utilities in the Pacific Northwest are experiencing changing operational dynamics based on the environmental agendas of various stakeholders. For PSE, this has evidenced itself in a number of ways, including the targeted early closure of its Colstrip plant and Microsoft's tariff agreement. Each of these provide unique execution challenges for PSE that require the company to adapt to, and incorporate, third party preferences in utility decision making - mainly regarding its power supply portfolio.

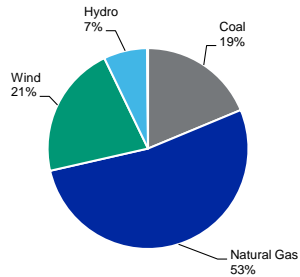
Closure of Colstrip 1 and 2

The 2,100 MW, four unit, coal-fired power generation plant in Rosebud County, MT (PSE owns a 50% stake in Units 1 and 2 and a 25% stake in Units 3 and 4) had been receiving increased criticism from environmental groups in and around the state of Washington. Units 1 and 2, the oldest of the four units, have faced increasing pressure for early retirement due to emissions generated from the facility.

Washington's Senate Bill 6248 allows PSE to collect decommissioning funds for the possible retirement of the two units and PSE and co-owner Talen Energy Supply have reached an agreement with environmental groups to retire Units 1 and 2 by no later than July 2022. PSE's 2017 rate case order ensures full recovery of and a return on Colstrip plant balances, a credit positive as it helps support the company's financial position as it addresses an uncertain liability. PSE's depreciation increased for all four Colstrip units, in order to recover plant costs by the expected closure in 2022 for Units 1 and 2 and based on a negotiated depreciation life ending on December 31, 2027 for Units 3 and 4.

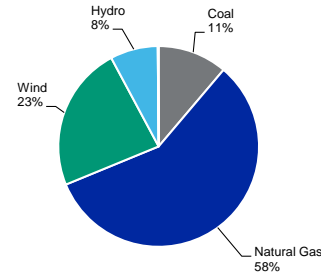
We also view the closure as a credit positive from an environmental and sustainability perspective, since the four units (just over 30% of which are owned by PSE) have collectively over 2,000 megawatts of nameplate generating capacity, producing over 13,000 gigawatt hours of electricity and emitting approximately 15.2 million tons of carbon in 2017. The closure of these units mitigates some of PSE's future environmental risk. Following the closure, PSE's owned generation will consist of approximately 11% coal or lower (depending on whether Colstrip is replaced with a company owned resource or not), down from 19%.

Exhibit 5
Owned generation - 2017 (MW)



Source: Puget Energy

Exhibit 6
Owned generation - after Colstrip 1 & 2 closure (MW)



Source: Puget Energy

With the closure of Colstrip Units 1 and 2 in 2022, PSE would require additional capacity resources to meet expected demand. In its integrated resource plan (IRP) filed in November 2017, PSE outlined a multi-part strategy to address the supply shortfall that includes the implementation of energy efficiency programs, additional renewable resources, and additional capacity resources such as battery storage and peak load generation plants.

Microsoft tariff buyout

In July 2017, the WUTC approved a settlement agreement which allows Microsoft to directly purchase clean energy to power its 15 million square foot campus in the Puget Sound region, in exchange for a \$24 million buyout of its existing tariff agreement with PSE. According to Microsoft, the agreement covers approximately 80 percent of the company's total energy load in the Puget Sound area; the remaining 20 percent will continue to be serviced by PSE. As part of the settlement, Microsoft agreed to continue to contribute toward PSE's conservation programs and low-income customer support. PSE anticipates that Microsoft will meet the conditions required to begin service under this new contract, including installation of required meters, procurement of new supply contracts and payment of the exit fee, by early 2019.

Although this development is negative for PSE, since it erodes the monopoly service paradigm which is fundamental to regulated utilities, we believe the WUTC will work with PSE to limit its re-occurrence and to mitigate the effects should this happen with another industrial customer. The pricing of the Microsoft agreement was structured in an effort to avoid cost-shifting to remaining customers and the WUTC made comments that the decision was not intended to be precedent-setting for other customers. Nevertheless, there still exists a degree of uncertainty for whether other industrial customers (e.g., The Boeing Company (A2 stable), Kroger Co. (Baa1 stable) and refineries) could follow suit. We note that any material stranded costs from such a development would be a credit negative for PSE.

In an effort to help customers achieve their sustainability goals, PSE established the Green Direct program, approved by the WUTC in September 2016, to provide green generation to eligible corporate customers using more than 10 million kwh/year and to government customers. The program consists of two phases capped at a total participation size of 75 MW. Phase 1 (up to 42 MW) is fully subscribed with customers including Starbucks Corporation (Baa1, negative), Target Corporation (A2, stable) and King County, Washington. Power for this first phase will be sourced from the proposed 130 MW Skookumchuck wind farm expected to be operational in 2019. PSE is currently in the process of determining participation for Phase 2 of the program.

Financial performance expected to moderate but remain strong, despite federal tax reform

While the recent financial performance of both Puget and PSE compares strongly to peers, we expect the improvement in financial metrics to be tempered somewhat as a result of cash flow loss attributable to tax reform, changes in the utility's rate plan and significant capital expenditures.

On 30 March 2018, PSE filed for electric and gas rate changes to reflect the decrease in the federal corporate income tax rate from 35.0% to 21.0% effective 1 May 2018. Also, as a result of tax reform, PSE booked excess deferred income taxes (EDIT) of approximately \$813 million in aggregate, comprised of \$725 million of protected EDIT and \$88 million of unprotected EDIT. The return of the EDIT and approximately \$35 million associated with the change in tax rate for the 1 January through 30 April 2018 period will be addressed in PSE's next rate case in 2019. PSE proposes to fund additional electric reliability capex with the unprotected EDIT and the \$35 million tax over-collection in 2018. We expect the cash flow impact of tax reform to be mitigated by increased depreciation primarily associated with Colstrip.

Over the next 12 to 18 months, PSE's capital expenditures are significant, in line with 2017 levels of close to \$1 billion, relative to historical levels in the \$500 - \$700 million range. This elevated capex is primarily to fund strategic and risk mitigation initiatives, including investments in data centers, disaster recovery and customer service. We expect PSE to fund capex prudently with internally generated funds and a mix of debt and equity.

We believe that PSE will continue to produce ratios of cash flow from operations before changes in working capital (CFO pre-WC) to debt within the low 20% range and retained cash flow to debt in the mid to high teens over the next 12-18 months.

Liquidity Analysis

We expect PSE to maintain good liquidity for the next 12-18 months.

PSE's internal liquidity consists of cash flow from operations, which we expect to be above \$900 million through 2019. This will be insufficient to cover relatively high capex of around \$1.0 billion over the next twelve months and dividends to Puget, which were around \$280 million through 30 June 2018. We expect that PSE's negative free cash flow of over \$300 million will be funded with a balanced mix of debt and equity.

Puget's upstream dividend policy for PSE has been aggressive, historically, with a five year average payout of 96% for the utility. For 2017, dividends were lower at a 71% payout, due to the high capex demands. However, as of 30 June 2018 LTM, dividends were slightly higher, at an 88% payout. PSE's dividends are somewhat restricted by the maintenance of its equity layer to achieve maximum allowed returns as well as the minimum equity ratio of 44% imposed by ring-fencing provisions instituted as part of its 2009 acquisition.

PSE's external liquidity consists of a five-year \$800 million unsecured revolving credit facility to meet short-term liquidity needs that matures in October 2022. As of 30 June 2018, no amounts were outstanding under PSE's credit facility and \$28 million was outstanding under the commercial paper program.

The credit facility has a \$75 million sublimit for same day borrowings and the facilities do not require material adverse event representation for new money borrowings. The credit facility also has an expansion feature which allows PSE to obtain incremental term loans of up to \$600 million, upon the banks' approval. The credit agreement also contains a financial covenant, for which debt to capitalization cannot exceed 65%. As of 30 June 2018, PSE was in compliance with all applicable covenant ratios. Additionally, Puget has access to an \$800 million senior secured credit facility due in October 2022.

The company's next debt maturity is \$17 million of first mortgage bonds in 2025, followed by \$300 million senior secured notes due in 2027.

Structural Considerations

The two notch rating differential between PSE and its parent, Puget, reflects the structural subordination that exists at Puget, and dividend limitations imposed by the WUTC. As of 30 June 2018, Puget had approximately \$1.7 billion of stand-alone debt at the parent company, representing approximately 30% of total consolidated balance sheet debt.

Due to the significant level of debt residing at Puget and PSE being the sole source of cash flow to support Puget's debt service, regulatory protections and credit insulation are an important aspect in PSE's credit analysis.

Key among the ring-fence-like mechanisms established when the WUTC approved the change in ownership in 2009 are: a required "golden share" vote to address concern about potential substantive consolidation of PSE in any parent bankruptcy or any voluntary filing by PSE; minimum required levels of PSE common equity to be maintained; and limits on PSE and parent distributions under certain circumstances. For example, dividend restrictions would apply if PSE's common equity ratio, calculated on a regulatory basis, is 44% or below except to the extent a lower equity ratio is ordered by the WUTC, and if PSE's issuer rating falls below investment grade. If PSE's credit rating is below investment grade, PSE's ratio of EBITDA to interest expense, for the four most recently ended fiscal quarters prior to such date, must be equal to or greater than 3.0x.

Methodology and Scorecard

Exhibit 7

Rating Factors			Moody's 12-18 Month Forward View	
Puget Sound Energy, Inc.			As of Date Published [3]	
Regulated Electric and Gas Utilities Industry Grid [1][2]			Current LTM 6/30/2018	Score
Factor	Measure	Score	Measure	Score
Factor 1 : Regulatory Framework (25%)				
a) Legislative and Judicial Underpinnings of the Regulatory Framework	A	A	A	A
b) Consistency and Predictability of Regulation	A	A	A	A
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	A	A	A	A
b) Sufficiency of Rates and Returns	Baa	Baa	Baa	Baa
Factor 3 : Diversification (10%)				
a) Market Position	Baa	Baa	Baa	Baa
b) Generation and Fuel Diversity	A	A	A	A
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	5.1x	A	5.1x - 5.5x	A
b) CFO pre-WC / Debt (3 Year Avg)	23.8%	A	20% - 24%	A
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	17.8%	A	15% - 19%	A
d) Debt / Capitalization (3 Year Avg)	44.2%	A	42% - 46%	A
Rating:				
Grid-Indicated Rating Before Notching Adjustment			A3	A3
HoldCo Structural Subordination Notching				
a) Indicated Rating from Grid			A3	A3
b) Actual Rating Assigned			Baa1	Baa1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations

[2] As of 6/30/2018(L)

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

Source: Moody's Financial Metrics

Appendix

Exhibit 8

Cash Flow and Credit Metrics [1]

CF Metrics	Dec-14	Dec-15	Dec-16	Dec-17	LTM Jun-18
As Adjusted					
FFO	883	948	1,026	1,120	1,067
+/- Other	(208)	(114)	(123)	(103)	(44)
CFO Pre-WC	675	833	903	1,016	1,023
+/- ΔWC	138	(68)	(47)	105	83
CFO	813	765	857	1,122	1,105
- Div	328	275	262	232	282
- Capex	518	609	708	994	1,015
FCF	(32)	(119)	(112)	(105)	(191)
(CFO Pre-W/C) / Debt	16.4%	20.1%	21.6%	24.0%	24.6%
(CFO Pre-W/C - Dividends) / Debt	8.4%	13.5%	15.3%	18.5%	17.8%
FFO / Debt	21.5%	22.9%	24.5%	26.4%	25.7%
RCF / Debt	13.5%	16.3%	18.2%	20.9%	18.9%

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. Period are Financial Year-end unless indicated. LTM = Last Twelve Months
Source: Moody's Financial Metrics

Exhibit 9

Peer Comparison Table [1]

(in US millions)	Puget Sound Energy, Inc. Baa1 Stable			Indianapolis Power & Light Company Baa1 Stable			Cleco Power LLC A3 Stable			Avista Corp. Baa1 Negative			PacifiCorp A3 Stable		
	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM
	Dec-16	Dec-17	Jun-18	Dec-16	Dec-17	Mar-18	Dec-16	Dec-17	Jun-18	Dec-16	Dec-17	Mar-18	Dec-16	Dec-17	Mar-18
Revenue	3,165	3,460	3,373	1,347	1,350	1,367	1,159	1,185	1,202	1,442	1,446	1,419	5,201	5,237	5,140
CFO Pre-WC	903	1,016	1,023	293	295	312	228	287	293	386	404	378	1,791	1,701	1,699
Total Debt	4,189	4,240	4,151	1,861	1,920	1,937	1,420	1,534	1,591	1,991	2,051	1,993	7,727	7,380	7,337
CFO Pre-WC / Debt	21.6%	24.0%	24.6%	15.8%	15.4%	16.1%	16.1%	18.7%	18.4%	19.4%	19.7%	19.0%	23.2%	23.0%	23.2%
CFO Pre-WC - Dividends / Debt	15.3%	18.5%	17.8%	8.4%	8.4%	9.7%	8.3%	9.9%	9.2%	15.0%	15.2%	14.3%	11.9%	14.9%	12.9%
Debt / Capitalization	44.4%	48.5%	47.6%	51.0%	54.6%	54.6%	35.4%	41.2%	41.9%	44.5%	48.4%	47.4%	38.7%	42.2%	42.4%

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. FYE = Financial Year-end. LTM = Last Twelve Months.
Source: Moody's Financial Metrics

Ratings

Exhibit 10

Category	Moody's Rating
PUGET SOUND ENERGY, INC.	
Outlook	Stable
Issuer Rating	Baa1
Senior Secured	A2
Commercial Paper	P-2
PARENT: PUGET ENERGY, INC.	
Outlook	Stable
Issuer Rating	Baa3
Senior Secured	Baa3
PUGET SOUND ENERGY, INC. (OLD)	
Senior Secured	A2

Source: Moody's Investors Service

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJJK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJJK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJJK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJJK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJJK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJJK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJJK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454