

## CREDIT OPINION

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New Issue

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## Energy Northwest, WA

New Issue: Moody's assigns Aa1 to Energy NW's(WA) CGS, Project 1 and Project 3 bonds. BPA's Aa1 affirmed. Outlook stable

### Summary Rating Rationale

Moody's Investors Service has assigned Aa1 ratings to Energy Northwest's (ENW) \$242 million of Project 1 Electric Revenue Refunding Bonds, Series 2017-A; \$194.4 million of Columbia Generating Station (CGS) Electric Revenue and Refunding Bonds, Series 2017-A; \$159.7 million of Project 3 Electric Revenue Refunding Bonds, Series 2017-A; \$525 thousand of Project 1 Electric Revenue Refunding Bonds, Series 2017-B (Taxable); \$3.3 million of Columbia Generating Station Electric Revenue and Refunding Bonds, Series 2017-B (Taxable); and \$905 thousand of Project 3 Electric Revenue Refunding Bonds, Series 2017-B (Taxable). These bonds are supported by net billing agreements with Bonneville Power Administration (BPA, Aa1/stable) and thus are rated the same as BPA's other supported obligations. Moody's also affirmed BPA's Aa1 issuer rating and BPA supported debt obligations. The rating outlook is stable.

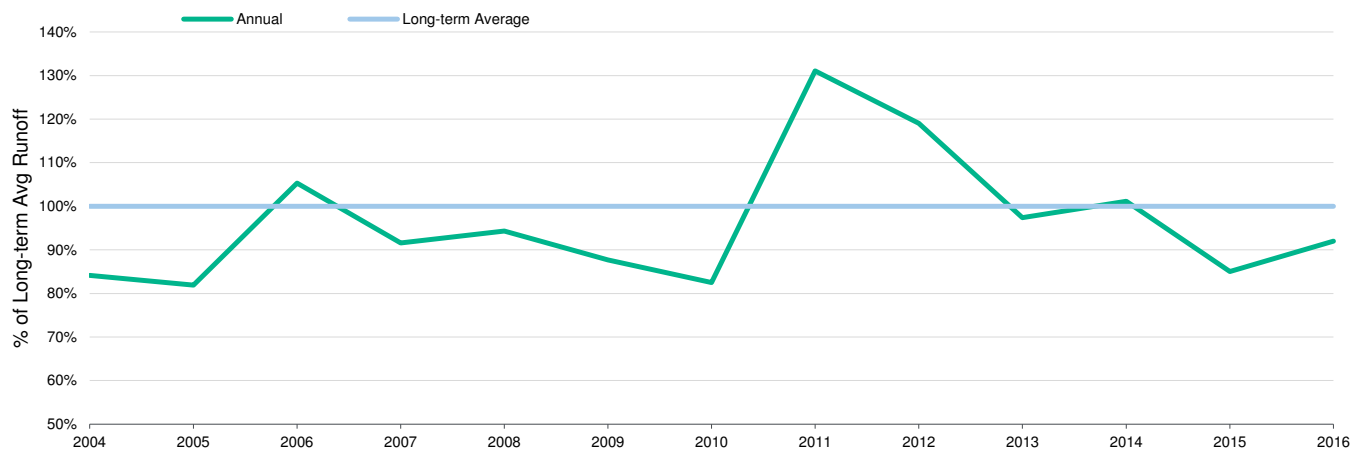
The Aa1 rating on Energy Northwest's (ENW) CGS, Project 1, and Project 3's revenue bonds reflect BPA's contractual obligation to pay including debt service under each project's net billing agreement, BPA's long history of meeting its contractual obligations, and BPA's Aa1 issuer rating.

BPA's Aa1 issuer rating reflects its credit strengths comprising of US Government (Aaa stable) support features, strong underlying hydro and transmission assets, very competitive power costs, and long-term power supply contracts with customers through 2028. Explicit US Government support features include borrowing authority with the US Treasury (\$2.9 billion available as of September 30, 2016) and the legal ability to defer its annual US Treasury debt repayment if necessary. BPA's importance to the US Northwest region and its role as a US government agency represent drivers of implicit support. US federal government's strong explicit and implicit support features are key credit strengths that support BPA's Aa1 rating even though BPA faces weaknesses outlined below.

BPA's rating also considers long-term credit challenges such as hydrology and wholesale market price risk, 'regulated utility' like ratemaking process, environmental burdens, and forward-looking consolidated financial metrics that range in the 'Ba' to 'A' category per Moody's U.S. Public Power Electric Utilities with Generation Ownership Exposure methodology. Hydrology and wholesale market prices are the greatest volatility drivers of BPA's financial performance and have been the main driver of BPA's declining internal liquidity over the last ten years. These factors are likely to persist owing to the volatility associated with hydro resources along with the weak wholesale power that exists in the

Pacific Northwest. Additionally, BPA's accelerated repayment of federal appropriations debt and declining availability under the US Treasury line are continuing factors that diminish the US government's explicit support features over time and weakens BPA's positioning within its Aa1 rating. After the FY2018-2019 rate period, the combination of declining US Treasury line availability, declining internal reserves for risk, sustained weak wholesale power market and a reduction in the degree of federal debt subordination could lead to negative rating action.

Exhibit 1

**Columbia River Runoff at Dalles**

Source: Moody's Investors Service, BPA

**Credit Strengths**

- » U.S. government support through US Treasury borrowing line and federal debt service deferral ability
- » Regional importance as indirect power provider for 14 million people
- » Access to 22 GW of low cost, federally owned hydro system
- » Dominant electric transmission provider in the Pacific Northwest
- » Highly competitive rates
- » Long-term power sales contracts with creditworthy public power entities

**Credit Challenges**

- » 'Regulated utility' like ratemaking process
- » Significant exposure to hydrology risk and wholesale power markets
- » 'Ba' to 'A' category forecasted financial metrics
- » Federal debt subordination weakening
- » Declining reserves for risk and availability under US Treasury Line
- » Significant fish and wildlife environmental costs

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.moody.com](http://www.moody.com) for the most updated credit rating action information and rating history.

## Rating Outlook

The stable outlook on the CGS, Project 1, and Project 3 revenue bonds reflects BPA's stable outlook. BPA's stable outlook considers BPA's FY 2018-19 proposed rates and BPA's plan to maintain sufficient availability under the US Treasury line through FY2019.

## Factors that Could Lead to an Upgrade

- » Ratings on the CGS, Project 1 and Project 3 revenue bonds could be upgraded if BPA is upgraded.
- » BPA's rating could improve over the long term if BPA is able to substantially mitigate hydrology and wholesale price risk and if BPA implements policies to ensure strong internal reserves for risk resulting in at least 250 days cash on hand on a sustainable basis.

## Factors that Could Lead to a Downgrade

- » Ratings on the CGS, Project 1 and Project 3 revenue bonds could be downgraded if BPA is downgraded or if the underlying net billing agreement is violated or weakened.
- » BPA's ratings could be lowered if the US government's credit rating is downgraded, if we expect internal liquidity to fall below 60 days or availability under the US Treasury line declines below \$1.5 billion on a sustained basis, or BPA experiences regulatory delays in receiving full recovery of costs. Other factors that could lead to a downgrade include any sign of waning federal government support or decline in the proportion of subordinated, deferrable debt owed to the US Treasury beyond actions currently planned.

## Key Indicators

Exhibit 2

	2012	2013	2014	2015	2016
Total Sales (MWh)	94,774,440	87,547,440	89,325,720	81,599,400	84,463,920
Debt Outstanding (\$ '000)	14,534,245	15,013,366	15,571,590	16,089,851	15,641,400
Debt ratio (%)	96.6%	95.7%	95.7%	94.5%	90.5%
Total Days Cash on Hand (days)	132	117	136	152	103
Total Debt Service Coverage Ratio (x) (Post Transfer/PILOTs - All Debt)	1.11	1.05	1.19	1.17	0.57
Non Federal Debt Service Coverage Ratio (x) (Post Transfers/PILOTs - Non-federal Debt)	2.07	1.70	3.46	4.34	3.77

Source: Moody's Investors Service, BPA

## Recent Developments

In November 2016, BPA proposed rates for FY2018-2019, which would increase power rates by an average of 3.5% and transmission rates by 1.1% for the two year period. The BPA administrator will finalize the rates in July 2017 and final rates will go into effect on October 1st, 2017 subject to FERC approval.

As part of FY2018-2019 rates, BPA has proposed a reserves policy which targets 90 days cash on hand (based on reserves for risk) for each line of business with a minimum of 60 days cash on hand. If liquidity is below the minimum at the start of the year, a surcharge would trigger subject to a 3% cap. Liquidity above 120 days cash on hand would be credited back to customers, used to reduce debt or fund capex. Implementation of a reserve policy would be credit positive since BPA's reserves for risk have served as BPA's frontline cushion against underperformance and has dropped steeply since 2008. That said, we see the proposed policy as primarily seeking to maintain current reserve levels since BPA had around 100 days cash on hand at FY2016.

For FY 2016, BPA faced another year of below average hydrology conditions at around 92% of average. This was exacerbated by the need to refill reservoirs at the Canadian hydro dams in FY 2016. BPA previously drew down on available reservoir storage in FY2015 to offset low hydrology conditions. BPA's 'reserves for risk' serves as the primary buffer against any underperformance and it dropped to \$602 million in FY 2016 (\$845 million in FY 2015). For FY 2017, BPA reported in its Q1 quarterly business review that reserves for risk are forecasted to further drop to \$395 million primarily due to lower power and transmission sales and higher than expected operating

costs. BPA's rapid decline in its reserves for risk is a credit negative and an inability to ensure internal reserves at or near current levels could lead to a negative rating action.

## Detailed Rating Considerations

### Revenue Generating Base

#### Major Power and Transmission Provider to the Pacific Northwest

BPA derives its revenues from the sale of power and transmission services from its dominant hydroelectric generation and electric transmission assets in the Pacific Northwest. BPA has roughly 75% of the Pacific Northwest's bulk electric transmission consisting of 15,000 miles of high voltage transmission lines and 260 substations and other facilities located in BPA's service area. Additionally, BPA's power supply represents roughly one third of the total regional power supply and consists of 22 GW of mostly federally owned hydro plants, the 1.1 GW CGS nuclear plant, and market and contract purchases. The federal hydro projects also serve numerous purposes, including irrigation, navigation, recreation, municipal and industrial water supply, and fish and wildlife protection.

Power sales represent the largest portion at typically 75% of total revenue and the majority of these sales are made under long-term power sales contracts (Preference Contracts) maturing in 2028 with 133 municipally owned utilities, cooperatively owned utilities, and federal agencies. Sales to these customers totaled approximately \$2 billion in FY 2016 and represent BPA's largest revenue segment at nearly 60% of total revenues. Snohomish County P.U.D. 1, WA Electric Ent. (Aa3/stable) is BPA's largest preference customer at 10% of power sales in FY 2016. Power rates charged by BPA are highly competitive and BPA's average tier 1 rate for FY 2016 was \$35.63/MWh.

Electric transmission sales are BPA's second largest revenue source at \$947 million in revenues in FY 2016. BPA's top transmission customer is Puget Sound Energy Inc (Baa1 stable) at 12% each of transmission revenue in FY 2016.

Exhibit 3

Power Customer Name	Type	Rating	% of Power Sales	Transmission Customer Name	Rating	% of Transmission Sales
Snohomish County P.U.D. 1, WA Electric Ent.	Preference	Aa3	10%	Puget Sound Energy, Inc.	Baa1	12%
Cowlitz County Public Utility District 1, WA	Preference	A1	7%	PacifiCorp	A3	11%
Seattle (City of) WA Electric Enterprise	Preference	Aa2	7%	Portland General Electric Company	A3	9%
Pacific Northwest Generating Coop	Preference	NR	6%	Powerex Corp.*	NR	7%
Tacoma Power, WA	Preference	Aa3	5%	Seattle (City of) WA Electric Enterprise	Aa2	5%
Clark County Public Utility District 1, WA	Preference	A1	4%	Iberdrola Renewables Inc.	Baa1	5%
Eugene Water & Electric Board, OR	Preference	Aa2	3%	Snohomish County P.U.D. 1, WA Electric Ent.	Aa3	4%
Benton County Public Utility District 1, WA	Preference	Aa3	2%	Pacific Northwest Generating Coop	NR	2%
Flathead Electric Cooperative, Inc.	Preference	NR	2%	Hermiston Power LLC	NR	2%
Central Lincoln Peoples Utility District, OR	Preference	NR	2%	Clark County Public Utility District 1, WA	A1	2%
Total			48%	Total		59%

\*Subsidiary of British Columbia Hydro & Power Authority (Aaa)  
Source: Moody's Investors Service, BPA

### 'Regulated Utility' Like Rate Making Process Could Delay Timely Recovery

Unlike a traditional public power utility, BPA's ratemaking procedure for power and transmission rates charged to its customers involves an extensive process that shares similarities with a rate regulated utility that often create complications and delays in timely and full recovery of BPA's costs. The Northwest Power Act contains specific ratemaking procedures for BPA, mandates justification and reasons in support of such rates, and requires a hearing. The BPA Administrator ultimately decides the power and transmission rates based on the hearing record including all information submitted. Rates established by BPA are subject to approval by FERC. Currently,

BPA has rate cases every two years. In a stress situation, BPA could file an expedited rate with FERC and the whole process could take several months for an interim rate approval. We see BPA's rate setting process as materially weaker than peers such as Tennessee Valley Authority (Aaa stable) that have unfettered, self-regulated rate setting.

Notwithstanding the 'regulated utility' like ratemaking process that BPA operates under, we recognize that BPA has raised rates in difficult situations such as the power crisis of 2000-2001 when BPA raised rates by 46%. Additionally, within a rate period, BPA is able to charge up to an additional \$300 million per year starting at the beginning of the fiscal year under the Cost Recovery Adjustment Clause (CRAC) if Power Service's accumulated net revenue is below a set level that is equivalent to reserves for risk at zero balance. A separate NFB Adjustment for certain environmental costs can raise the \$300 million CRAC limit. While the CRAC mechanism adds some flexibility to BPA's two-year rate periods, the annual basis of the test and low trigger point limit the benefit of the CRAC mechanism.

A credit supportive rate setting tool is BPA's use of its treasury payment probability tool whereby BPA proposes rates at levels that it can meet its US Treasury payments at a 95% confidence level based on its cash flows and reserves. BPA's approach should ensure a high probability of near-term payments to the US Treasury and an extremely high probability of near-term timely payments on non-federal debt service, which is effectively senior to the debt owed to the US Treasury.

### **Regional Hydrology and Wholesale Price Risk Are BPA's Biggest Volatility Drivers**

BPA's financial results can be materially impacted by hydrology in the Columbia River Basin and wholesale power prices since market based power sales can represent roughly 10-15% of total revenues. Since 2001, hydrology has been very volatile with high and low around 130% and 60%, respectively, of the long-term average. Similarly, power prices have also been volatile with a recent peak nearing \$60/MWh in 2008 and a low below \$20/MWh in 2012. These factors, which are outside of BPA's control, have contributed heavily to periods of underperformance and represent BPA's biggest driver of cash flow volatility since power sales under long-term contracts and transmission sales are much more stable and predictable. Moreover, wholesale power revenues have, in the past, provided a source of cash flow for funding capital expenditures at BPA. In light of the sustained weak power markets, BPA has been more reliant on the borrowing authority with the US Treasury (currently at \$2.9 billion). The volatility of wholesale revenues emphasizes the importance of maintaining significant internal liquidity especially at BPA's rating level.

### **Operational and Financial Performance**

#### **Environmental Costs Are Material**

BPA faces conflicting uses of the Columbia River and environmental regulations, such as the Endangered Species Act (ESA), that contributes significantly to BPA's costs and weighs heavily on BPA's cash flows. Biological opinions prepared by National Oceanic and Atmospheric Administration Fisheries Service and the US Fish and Wildlife Service mandate actions to protect fish species resulting in direct costs such as hatcheries and indirect loss of revenue from hydro dam operational changes. For FY2016, BPA estimates total fish and wildlife costs at approximately \$622 million consisting of \$495 million in direct costs and \$127 million of indirect costs. BPA was able to recover the non-power related environmental costs totaling \$77 million from the US Treasury in FY 2016. While BPA's fish and wildlife mitigation costs are considerable, BPA's federally and non-federally owned generation are emissions free since they consist of hydro and nuclear generation. As such, BPA remains insulated against new federal regulations including those for greenhouse gases and BPA could benefit if new emissions regulations increase the market price of power.

#### **Financial Metrics Are Low for the Rating**

On a fully consolidated basis including federal debt, BPA's financial metrics are commensurate with Ba to A category scoring on a historic basis. Total DSCR has averaged around 1.0x over the last three years, which is commensurate with a 'Ba' scoring, while BPA's debt ratio is high at an average of 95% which is commensurate with a 'Ba' scoring. Looking forward, BPA's sets rates to achieve around 1.0x DSCR; however, actual performance can deviate especially if hydrology and market prices are different than expectations. Separately, non-federal DSCR have risen to almost 3.8x since principal payments for CGS, Project 1, and Project 3 have been pushed out to the future resulting in an interest only coverage ratio for non-federal DSCR.

## LIQUIDITY

For FY 2016, BPA had reserves for risk, a measure of internal liquidity, totaling \$602 million (103 days cash on hand), which is commensurate with the low end of the 'A' scoring. Below average hydrology, the need to replenish reservoirs, and lower than expected power prices were major drivers of the liquidity drop versus the \$845 million (152 days cash on hand) at year-end FY 2015. For FY 2017, BPA expects its reserves for risk to decline to \$395 million mainly due to lower power and transmission sales and higher operating costs.

As part of its current rate case, BPA proposed a reserve policy that targets 90 day cash on hand with a surcharge if reserves for risk drop below 60 days cash on hand. Implementation of a reserve policy would be credit positive since BPA's reserves for risk have served as BPA's frontline cushion when underperformance occurs and has dropped steeply since 2008. That said, we see the proposed policy as primarily seeking to maintain current reserve levels since BPA had little over 100 days cash on hand at FY2016.

Supplementing BPA's internal liquidity is a \$750 million borrowing sublimit under the US Treasury line that can be used to fund operating expenses. This line of credit is renewed on an ongoing basis and any draw needs to be repaid within one year.

## Debt and Other Liabilities

### DEBT STRUCTURE

BPA's \$15.6 billion in total debt consists of \$8.5 billion of non-federal debt and \$7.2 billion of federal debt, which is debt owed by BPA to the federal government. BPA's non-federal debt are debt like contractual obligations such as BPA's obligation to CGS, Project 1, and Project 3 under the net billing agreements. In addition to the net billing agreements, BPA has non-federal debt through leases, power prepay, and other take-or-pay contractual obligations. Since these obligations are treated as an operating expense of BPA, they have priority over BPA's direct debt obligation to the US Treasury and BPA can defer payments to US Treasury, if necessary. This deferral ability provides BPA a major source of financial flexibility under extreme situations though BPA has not deferred such payments since 1983 and any deferral is likely to have significant negative political ramifications. The significantly higher non-federal DSCR previously described above also highlights the substantial benefits of the federal debt's effective subordination to non-federal debt and these benefits are supportive of the Aa1 rating on CGS, Project 1, and Project 3.

We see BPA's Regional Cooperation Debt (RCD) program as undermining the benefits of the federal debt's subordination, since the program results in a substantial extension of non-federal debt in exchange for the accelerated repayment of federal appropriations debt. While we recognize the cost savings benefits for this strategy, Energy Northwest's debt funding of interest and O&M expenses to accelerate repayment of federal appropriations debt further undermines the subordination and is credit negative.

### DEBT-RELATED DERIVATIVES

BPA indirectly has interest rate derivative like exposure of around \$1 billion mostly tied to its lease financed transmission assets. We understand there are no collateral posting requirements under any conditions for these derivatives.

### PENSIONS AND OPEB

BPA employees are part of the US government's post-retirement benefit programs for all federal civil employees. The post-retirement benefits are overseen by the United States Office of Personnel Management (OPM), an independent agency that manages the civil service of the federal government. As such, BPA does not record any accumulated plan assets or liabilities related to the administration of a retirement plan.

## Management and Governance

### US Government Support is a Major Strength

While BPA's obligations do not benefit from the full faith and credit of the United States Government, BPA benefits from significant explicit and implicit support elements from the US Government. The key support elements consist of BPA's borrowing line (\$2.9 billion available) with the US Treasury and ability to defer payments to the US Treasury. That said, BPA forecasts the US Treasury line availability shrinking over time which we see as weakening a key support element and could become a driver of future negative rating action.

A strong qualitative consideration for implicit support include BPA's role as a line agency of the US Department of Energy. As a line agency of the US DOE, the BPA Administrator reports to the US Secretary of Energy and BPA has numerous linkages with other federal

agencies. For example, the US Army Corp of Engineers and the US Bureau of Reclamation own and operate the federal dams while BPA markets the power output and pays for all of the associated operating and capital costs.

Importance to the US Northwest region is another key qualitative factor. BPA is responsible for certain treaty responsibilities with Canada regarding the federally owned dams, significant regional environmental protection programs, and coordination of river operations. Northwest US representation on key US House and Senate committees that deal with energy legislation is a credit strength.

Overall, we see these explicit and implicit US support as providing a multi-notch lift to BPA's standalone credit quality and represent key considerations for BPA's Aa1 rating. In a major stress scenario, Moody's expects any US Government support to BPA is likely to be provided through the established US Treasury credit line or deferral of payments to the US Treasury.

### Legal Security

CGS, Project 1, and Project 3's bonds are secured by a pledge of specific project revenues primarily sourced under substantially similar tri-party net billing agreements with BPA and project participants for each project. The Project 3's pledge is subordinate to \$29.2 million of prior lien bonds. The revenues for each project are not cross collateralized. There are no debt service reserves.

The net billing agreements obligate the project participants, consisting of numerous municipal and cooperative electric utilities, to pay ENW their proportionate share of the project's annual costs, including debt service, irrespective of whether the project is operable or terminated. BPA, in turn, is obligated to pay (or credit) the participants identical amounts by reducing the amounts the participants owe for power and service purchased from BPA under their power-sales agreements. BPA has also agreed, in the event of any insufficient payment by a participant, to pay the amount due in cash directly to the project. In 2007, Energy Northwest and BPA adopted a new direct pay agreement whereby Energy Northwest participants directly pay all costs to BPA rather than through Energy Northwest. BPA has made a clear and tested commitment to support the payment under the net billing through more than more than 30 years of stressful circumstances including legal challenges in the early 1980s.

### Use of Proceeds

Approximately \$97 million of CGS's bond proceeds will be used to fund capital spending. Remaining funds for CGS, Project 1, and Project 3 will be used primarily to extend bond maturities per its Regional Cooperation Debt program. As part of the Regional Cooperation Debt program, BPA expects to accelerate repayment of defacto subordinated federal appropriations debt in conjunction with the CGS, Project 1, and Project 3 debt maturity extensions.

### Obligor Profile

BPA was created in 1937 by an act of the US Congress and is one of four regional power marketing agencies within the US Department of Energy. BPA is primarily responsible for federally owned generation and electric transmission assets in the Pacific Northwest spanning all or parts of eight states. The Army Corps of Engineers and the Bureau of Reclamation own and operate the hydro projects. Many of the statutory authorities of BPA are vested with the Secretary of Energy, who appoints and acts through the BPA administrator. BPA's obligations are not backed by the full faith and credit of the US government and its cash payments are limited to funds available in the Bonneville Fund.

### Other Considerations: Mapping to The Grid

Moody's evaluates BPA's issuer rating under the US Public Power Electric Utilities with Generation Ownership Exposure methodology, and the grid indicated rating is Aa2, which is lower than its Aa1 assigned rating. BPA's close linkages with the federal government as a federal agency are the supportive considerations for the Aa1 assigned rating as compared to the Aa2 indicated rating under the US Public Power with Generation Ownership methodology.

Moody's also evaluates CGS, Project 1, and Project 3 ratings under the US Municipal Joint Action Agencies methodology, and the grid indicated rating is Aa1 for CGS and Baa1 for Project 1 and Project 3. The Aa1 rating assigned to all three projects reflects BPA's contractual obligation to pay including debt service under each project's net billing agreement, BPA's long history of meeting its contractual obligations, and BPA's Aa1 issuer rating.

The grid is a reference tool that can be used to approximate credit profiles in the US public power industry in most cases. However, the grid is a summary that does not include every rating consideration. Please see U.S. Public Power Electric Utilities with Generation Ownership Exposure and US Municipal Joint Action Agencies for more information about the limitations inherent to grids.

Exhibit 4

#### BPA Methodology Scorecard

Factor	Subfactor	Score	Metric
1. Cost Recovery Framework Within Service Territory		Aa	
2. Willingness and Ability to Recover Costs with Sound Financial Metrics		A	
3. Generation and Power Procurement Risk Exposure		Aa	
4. Competitiveness	Rate Competitiveness	Aa	
5. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	A	130
	b) Debt ratio (3-year avg) (%)	Ba	94%
	c) Adjusted Debt Service Coverage or Fixed Obligation Charge Coverage (3-year avg) (x)	Ba	1.0x
<b>Preliminary Grid Indicated rating from Grid factors 1-5</b>		<b>A2</b>	
		<b>Notch</b>	
6. Operational Considerations		1.0	
7. Debt Structure and Reserves		1.5	
8. Revenue Stability and Diversity		0.0	
<b>Grid Indicated Rating:</b>		<b>Aa2</b>	

Source: Moody's Investors Service



Exhibit 5

## ENW CGS Methodology Scorecard

Factor	Subfactor/Description	Score	Metric
1. Participant Credit Quality and Cost Recovery Framework	a) Participant credit quality. Cost recovery structure and governance	Aa1	
2. Asset Quality	a) Asset diversity, complexity and history	Baa	
3. Competitiveness	a) Cost competitiveness relative to market	Baa	
4. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Baa	49
	b) Debt ratio (3-year avg) (%)	Baa	130%
	c) Fixed obligation charge coverage ratio (3-year avg) (x)	Baa	1.06x
Material Asset Event Risk	Does agency have event risk?	No	
<b>Notching Factors</b>		<b>Notch</b>	
	1 - Contractual Structure and Legal Environment	0	
	2- Participant Diversity and Concentration	0	
	3 - Construction Risk	0	
	4 - Debt Service Reserve, Debt Structure and Financial Engineering	0	
	5 - Unmitigated Exposure to Wholesale Power Markets	0	
<b>Scorecard Indicated Rating:</b>		<b>Aa1</b>	

Source: Moody's Investors Service

Exhibit 6

## ENW Project's 1 and 3 Methodology Scorecard

Factor	Subfactor/Description	Score	Metric
1. Participant Credit Quality and Cost Recovery Framework	a) Participant credit quality. Cost recovery structure and governance	Aa1	
2. Asset Quality	a) Asset diversity, complexity and history	B	
3. Competitiveness	a) Cost competitiveness relative to market	B	
4. Financial Strength and Liquidity	a) Adjusted days liquidity on hand (3-year avg) (days)	Baa	
	b) Debt ratio (3-year avg) (%)	B	
	c) Fixed obligation charge coverage ratio (3-year avg) (x)	B	
Material Asset Event Risk	Does agency have event risk?	No	
<b>Notching Factors</b>		<b>Notch</b>	
	1 - Contractual Structure and Legal Environment	0	
	2- Participant Diversity and Concentration	0	
	3 - Construction Risk	0	
	4 - Debt Service Reserve, Debt Structure and Financial Engineering	0	
	5 - Unmitigated Exposure to Wholesale Power Markets	0	
<b>Scorecard Indicated Rating:</b>		<b>Baa1</b>	

Source: Moody's Investors Service

## Methodology

The principal methodology used in this rating was US Public Power Electric Utilities With Generation Ownership Exposure published in March 2016. An additional methodology used in this rating was US Municipal Joint Action Agencies published in October 2016. Please see the Rating Methodologies page on [www.moody.com](http://www.moody.com) for a copy of these methodologies.

## Ratings

Exhibit 10

### Energy Northwest, WA

Issue	Rating
Project 3 Electric Revenue Refunding Bonds, Series 2017-A	Aa1
Rating Type	Underlying LT
Sale Amount	\$159,705,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise
Project 3 Electric Revenue Refunding Bonds, Series 2017-B (Taxable)	Aa1
Rating Type	Underlying LT
Sale Amount	\$905,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise
Columbia Generating Station Electric Revenue and Refunding Bonds, Series 2017-A	Aa1
Rating Type	Underlying LT
Sale Amount	\$194,360,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise
Columbia Generating Station Electric Revenue and Refunding Bonds, Series 2017-B (Taxable)	Aa1
Rating Type	Underlying LT
Sale Amount	\$3,285,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise
Project 1 Electric Revenue Refunding Bonds, Series 2017-A	Aa1
Rating Type	Underlying LT
Sale Amount	\$241,990,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise
Project 1 Electric Revenue Refunding Bonds, Series 2017-B (Taxable)	Aa1
Rating Type	Underlying LT
Sale Amount	\$525,000
Expected Sale Date	04/12/2017
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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