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# Energy NW - Nine Canyon Wind Project

## Update to Key Credit Factors Following Upgrade to A1

## Summary


Nine Canyon's credit profile reflects the project's matured profile and its ability to maintain O&M costs well below the O&M cost cap while maintaining strong availability. The recent upgrade also considers Nine Canyon's unrestricted liquidity that has grown to a robust 912 days in addition to a 12 month debt service reserve. Looking forward, the scheduled ramp down in debt service starting in 2024 and resulting increased financial flexibility further supports the recent upgrade.

Also supporting the project's credit quality are Nine Canyon's power purchase contracts (PPAs) with ten participants with a weighted average credit quality of A1 and PPA terms that incorporate many features of traditional 'take or pay' power purchase agreements (PPAs). While the O&M cost cap and ambiguous termination language are atypical and represent weakness in the contractual structure of the project, Nine Canyon's strong liquidity and ability to manage its O&M costs sufficiently mitigates these weaknesses. Washington State's growing renewable portfolio and zero carbon emitting power requirements for electric utilities also provide a regulatory incentive for the offtakers to purchase the power.


## Credit strengths

- Take-or-pay contracts with participants of A1 weighted average credit quality
- Long operating experience
- Historical operating costs below O&M cap
- Robust liquidity
- State support for renewables

## Credit challenges

- Atypical contract features include O&M cap and ambiguous termination language
- Costs including debt service are above market prices

## Rating outlook

The stable outlook considers the Project's strong participant credit quality, demonstrated ability to keep costs within its O&M cap under its PPA, robust internal liquidity, and stable coverage ratios.

## Factors that could lead to an upgrade

» The project's rating could improve if the weighted average credit quality of the participants improves to Aa3 while maintaining robust liquidity and managing costs well below the O&M cost cap.

## Factors that could lead to a downgrade

» The project incurs major and sustained operational problems

» Internal liquidity declines materially

» Weighted average participant credit quality drops below A1

» Inability to recover costs under take-or-pay contracts

## Key indicators

Exhibit 1

ENERGY NORTHWEST, WA - NINE CANYON WIND PROJECT

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| Total Sales (mWh) | 196,750 | 244,620 | 225,950 | 250,370 | 196,620 |
| Debt Outstanding ($'000) | 108,750 | 101,620 | 94,180 | 86,540 | 78,530 |
| Debt Ratio (%) | 116.3 | 112.7 | 110.8 | 110.1 | 105.7 |
| Adjusted Days Liquidity on Hand (incl. Bank Lines)(days) | 644 | 771 | 896 | 794 | 912 |
| Fixed Obligation Charge Coverage (if applicable)(x) | 1.04 | 1.12 | 1.09 | 1.05 | 1.11 |

*Source: Audited financial statements, Moody's Investors Service*

## Profile

The Nine Canyon project is a wind power project that totals 95.9 MW and consists of 63 wind turbines and sells power under take-or-pay contracts to creditworthy public power entities in Washington State. The project was built in three phases (each a Phase) comprising of the 48.1 MW Phase 1, 15.6 MW Phase 2 and 32.2 MW Phase 3 with commercial operations reach in 2002, 2003, and 2008, respectively. Phase 1 and 2 use Siemens 1.3 MW wind turbines while Phase 3 uses Siemens 2.3 MW turbines.

## Detailed credit considerations

### Revenue Generating Base

**Strong Participants But PPA Contains Weak or Unclear Provisions Compared to a Typical JPA's Take or Pay Arrangement**

The project benefits from take-or-pay PPAs with highly rated public power participants with a weighted average credit quality of A1 (see exhibit 2). Additionally, the PPA contains many features found in a traditional take-or-pay arrangement whereby the participants have to pay for their respective share of debt service and operating costs, with a 25% step up feature for each phase in case of a participant default and generally does not contain specific project performance requirements.

Exhibit 2

## Purchaser's Share Information (1)

| Purchaser | Phase I Debt Service, % | Phase II Debt Service, % | Phase III Debt Service, % | Annual O&M Budget and Project Output, % |
|---|---|---|---|---|
| Grays Harbor PUD No. 1 | 12.50 | 12.50 | 37.52 | 20.89 |
| Okanogan PUD No. 1 | 25.00 | 25.00 | 0.00 | 16.61 |
| Grant PUD No. 2 | 25.00 | 0.00 | 0.00 | 12.54 |
| Franklin PUD No. 1 | 4.17 | 0.00 | 25.00 | 10.49 |
| Douglas PUD No. 1 | 6.25 | 43.59 | 0.00 | 10.23 |
| Benton PUD No. 1 | 6.25 | 0.00 | 18.63 | 9.39 |
| Chelan PUD No. 1 | 12.50 | 12.50 | 0.00 | 8.30 |
| Lewis PUD No. 1 | 2.08 | 0.00 | 15.71 | 6.32 |
| Mason PUD No. 3 | 2.08 | 6.41 | 3.14 | 3.14 |
| Cowlitz PUD No. 1 | 4.17 | 0.00 | 0.00 | 2.09 |

(1) Rounded to the nearest hundredth
*Source: Issuer*

The PPA also contains terms atypical in a JAA 'take or pay' arrangement, such as an annual payment limit and unclear termination provisions. The payment cap consists of the project's scheduled debt service, annual O&M cap of $7 million (2006) adjusted by an inflation index, and any credits or debits of any Renewable Energy Production Incentive (REPI) credits. We understands that the annual payment limit caps a participant's payment requirements for any given fiscal year, which could delay the step up requirement under the PPA until the next fiscal year. While the cost cap is a weakness relative to other take or pay projects, Moody's also recognizes that Nine Canyon's historical O&M costs have been below the cap that has risen over time. The Project's O&M costs have averaged around $6 million per year over the last five years and in FY2019.

Additionally, the benefits of the 25% step-up function for a participant default could be limited since the step-up provision is limited to each phase. For example, Phase 2 has five participants, including Douglas County Public Utility District 1, WA (Douglas PUD, Aa3), which takes around 44% of the Phase 2's power generation. Hypothetically, if a participant of the size of Grays Harbor PUD were to default and the remaining four participants stepped up 25% of their share, the project would still experience a shortfall of around 5% for the debt service portion of its cash flows.

Furthermore, Moody's understands that if a specific phase has not been in operations for 12 months and is not capable of returning to operations without capital improvements that make it uneconomic, the off-takers (with 60% approval) could ultimately seek to terminate the nonperforming phase. In such a scenario, Energy Northwest would have to sell all of the applicable assets and use the proceeds to pay down debt and expenses for that specific phase with any remainder given to the applicable participants. In Moody's view, the off-take contractual terms are ambiguous as to whether the participants would be required to pay for any debt that remains outstanding for the applicable phase assuming the PPA is terminated. We understand that Energy Northwest and their legal counsel believe the participants will continue to be responsible for their respective share of any outstanding debt in the scenario described above. In Moody's view, the Project's strong liquidity and demonstrated operating performance serve as important mitigants that help address this contract uncertainty and the O&M cost cap.

Since all three phases are in commercial operation, the only other possible termination events are at stated maturity or for a participant default. Under a participant default, the PPA explicitly states that the defaulting participant remains obligated to pay for its share of the debt service even after PPA termination.

## Financial Operations and Position

### Long Operating History

The project has long operating experience with the earliest Phase reaching commercial operations in 2002. Average unadjusted availability is good at around 98% over the last five years and unadjusted availability for FY 2019 is around the historical average at around 98%. The project's adjusted availability is higher at an average of around 99% since it excludes events like force majeure. For energy production, the Nine Canyon project generated about 197 GWh of power in FY 2019, which well below the average since 2008 of 233 GWh. We understand the primary cause for the below average generation were low wind speeds.

While the Project has years of operating performance and has maintained good unadjusted availability, Nine Canyon experienced numerous gearbox and main bearing failures for Phase 1 and 2 in the past. Siemens addressed these failures under warranty, which expired in August 2012, and a separate settlement was reached regarding the main bearings in 2010. The Project continues to replace the older gearboxes when necessary and approximately 13 older gearboxes remain out of 49 in total for Phases 1 & 2. Given the expiration of the warranty for Phase 1 and 2, Nine Canyon typically maintains one to four spare gearboxes on site and performs gear oil sampling on a six-month basis. We note there have been a few failures of the replacement gearboxes since FY2014.

For Phase 3, Nine Canyon has an extended warranty for this phase that expires in August 2028 and covers major components although it excludes the cost of crane support.

Ultimately, the Project's demonstrated operating performance is a key credit consideration given the unclear termination provision and O&M cost cap. An inability to maintain a sound operational performance would be credit negative.

### Support for Renewable Energy But Expensive Power

Nine Canyon benefits from Washington State's renewable portfolio standards which requires load serving entities with 25,000 customers or more to source renewable energy for 15% of retail energy sales by 2020. Washington state also passed in May 2019, a requirement that all utilities provide its customers with 80% non-greenhouse gas emitting power by January 2030 and 100% by January 2045. The Project contributes to the participants' ability to meet their renewable portfolio requirement. Moody's views Washington State's renewable portfolio requirement and non-GHG power supply requirements as important regulatory incentives for the participants to purchase Nine Canyon's power given the project's more expensive all-in costs. For FY2019, Nine Canyon's reported cost at approximately 7.08 cents/kWh and had 5 year average cost of 6.78 cents/kWh, which are well above the wholesale market price.

### Low Debt Service Coverage Typical of Take-or-Pay

Nine Canyon's debt service coverage ratios (DSCRs) have averaged around 1.08 times and the DSCR in FY2019 was slightly above average at 1.11 times. The low DSCRs are typical for a take-or-pay contractual arrangement, which should ensure at least one times coverage unless reserves are utilized.

#### LIQUIDITY

The project's minimum liquidity consists of a cash funded debt service reserve sized according to the traditional three prong test, a minimum $750K operating reserve, and a reserve and contingency account. Including the operating and contingency reserves, the project's unrestricted liquidity totaled a robust 912 days cash on hand at FY2019. Nine Canyon's overall strong liquidity position materially reduces concerns regarding the PPA's contractual weaknesses including the O&M cost cap.

## Debt and Other Liabilities

#### DEBT STRUCTURE

The project's debt consists of traditional fixed rate, amortizing debt with a final maturity in 2030.

### Legal Security

Nine Canyon's bonds are secured by a pledge of the net revenues of the project's three Phases, whose revenue are derived from take-or-pay contracts. Nine Canyon can issue additional debt with 100% participant approval for each project phase and the inclusion of the new debt under the respective PPAs.

#### DEBT-RELATED DERIVATIVES

None.

**PENSIONS AND OPEB**

The project participates in Washington State's statewide, multiple employer Public Employees Retirement System (PERS) pension plan. Moody's calculates the district's adjusted net pension liability (ANPL) for FY 2018 relating to its proportionate share of PERS to be around $3.7 million, compared to the issuer's reported proportionate share of the net pension liability of around $610K. Moody's adjusts the reported pension liabilities of entities that report under governmental accounting standards, to enhance comparability across rated issuers. Under governmental pension accounting, liabilities are discounted using an assumed rate of investment return on plan assets. Under our adjustments, we value liabilities using a market based discount rate for high quality taxable bonds, a proxy for the risk of pension benefits. We understand the project has no OPEB liability.

## Management and Governance

The project is part of Energy Northwest, a joint action agency located in Washington State. Energy Northwest oversees the plant and provides operations and maintenance serves. A participant committee comprised of the off-takers also oversees each Phase and at least 60% of the participants of that specific Phase must approve certain items like the annual O&M budget, annual operating plans, and the decision to terminate a specific Phase under certain conditions.

## Rating methodology and scorecard factors

Moody's evaluates Nine Canyon under the US Municipal Joint Action Agencies methodology, and, as depicted below, the scorecard indicated outcome is A2, which is one notch lower versus the A1 assigned rating. The higher A1 assigned rating reflects the project's long demonstrated history of maintaining costs below the O&M cap, robust unrestricted liquidity, and declining debt service.

Exhibit 3

| Factor | Subfactor/Description | Score | Metric |
|---|---|---|---|
| 1. Participant Credit Quality and Cost Recovery Framework | a) Participant credit quality. Cost recovery structure and governance | A1 | |
| | | | |
| 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) | Aaa | 867 |
| | b) Adjusted debt ratio (3-year avg) (%) | Baa | 116.00% |
| | c) Fixed obligation charge coverage ratio (3-year avg) (x) | Baa | 1.08x |
| | | | |
| Material Asset Event Risk | Does agency have event risk? | No | |
| | | | |
| **Notching Factors** | | **Notch** | |
| | 1 - Contractual Structure and Legal Environment | -1 | |
| | 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 | |
| | | | |
| **Scorecard Indicated Outcome:** | | **A2** | |

*Source: Moody's Investors Service*

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