Service Date: December 26, 2017

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

IN THE MATTER OF the Petition of New Colony Wind, LLC To Set Terms and Conditions for Qualifying Small Power Production Facility Pursuant to Mont. Code Ann. § 69-3-603	))))	REGULATORY DIVISION DOCKET NO. D2017.6.45 ORDER NO. 7560a

FINAL ORDER

APPEARANCES

FOR NEW COLONY WIND, LLC:

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FOR THE INTERVENORS:

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BEFORE:

Brad Johnson, Chairman
Travis Kavulla, Vice Chairman
Roger Koopman, Commissioner
Bob Lake, Commissioner
Tony O'Donnell, Commissioner

COMMISSION STAFF:

Will Rosquist, Administrator, Regulatory Division
Jeremiah Langston, Attorney
Mike Dalton, Rate Analyst
Bob Decker, Policy Analyst

PROCEDURAL HISTORY

1. On June 1, 2017, New Colony Wind, LLC ("New Colony") filed a Petition to Set Terms and Conditions for Qualifying Small Power Production Facility Pursuant to Mont. Code Ann.§ 69-3-603 ("Petition"). The initial Petition did not include testimony. New Colony agreed that the Commission could refrain from issuing a Notice of Petition and Opportunity to Intervene until the testimony supporting the Petition was provided. New Colony also agreed that the 180-day statutory period for decision would not begin until the testimony supporting the Petition was provided. Mont. Code Ann. § 69-3-603 (2015) ("The commission shall render a decision within 180 days of receipt of the petition"). On June 28, 2017, New Colony provided its testimony in support of its Petition.

2. The Commission issued a Notice of Application and Intervention Deadline and Initial Procedural Schedule on June 30, 2017, and set an intervention deadline of July 17, 2017. On July 18, 2017, the Commission granted intervention to the Montana Consumer Counsel ("MCC") and recognized NorthWestern Energy ("NorthWestern") as a respondent party to New Colony's Petition. *See* Mont. Admin. R. 38.2.901 (defining parties).

3. On July 26, 2017, the Commission issued Procedural Order 7560 setting deadlines for discovery, pre-filed testimony, identification of additional issues, and pre-hearing memoranda in this docket. Procedural Order7560 ¶ 3 (Jul. 26, 2017). The Procedural Order also set a hearing date of October 31, 2016.

4. The Commission received intervenor and respondent pre-filed testimony from NorthWestern and MCC on September 7, 2017.

5. On October 13, 2017, the Commission identified additional issues in this docket related to contract length and relevant authorities on this issue. *See* Notice of Additional Issues 1–4 (Oct. 13, 2017) (citing *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978,* Order No. 69, 45 Fed. Reg.12,214, 12,218 (Feb. 25, 1980); Mont. Code Ann. § 69-3-604(2); 18 CFR § 292.304(e)(2)(iii) (2017)). New Colony and NorthWestern filed additional issues testimony on October 25, 2017. The hearing was held on October 31, 2017.

6. New Colony filed its initial post-hearing brief on November 20, 2017. NorthWestern and MCC filed response briefs on December 1, 2017. On December 8, 2017, New Colony filed separate reply briefs to the response briefs of both MCC and NorthWestern.

7. On December 8, 2017, NorthWestern filed a Motion for Leave to File a Brief. Specifically, NorthWestern requested an opportunity to respond to the MCC's arguments that the Commission should find certain regulation costs that may be incurred in the future associated with the New Colony Wind Qualifying Facility as imprudently incurred costs. NWE Mot. for Leave 2 (Dec. 8, 2017) (citing MCC Response Brief 14-15 (Dec. 1, 2017)).

8. On December 12, 2017, the Commission held two regularly scheduled work sessions: 1) to discuss and act on whether to grant NorthWestern's Motion for Leave to File a Brief; and 2) to provide direction to the staff on drafting a final order to set terms and conditions of a PPA for New Colony.

PROCEDURAL MATTERS

9. On December 8, 2017, NorthWestern filed a Motion for Leave to File a Brief in Response. The Commission denies this for several reasons. First, a petition filed under Mont. Code Ann. § 69-3-603 allows the Commission only 180 days to render a decision. The Commission already finds challenges in developing a complete record to determine an avoided cost calculation and sundry issues in such a limited amount of time. On December 5, 2017, the Commission had already given notice of the work session on New Colony's Petition to be held on December 12, 2017, before NorthWestern filed this Motion for Leave on December 8, 2017. See Mont. Pub. Serv. Comm'n Agenda No. 17-12-12, p. 2 (Dec. 5, 2017).[1] The Commission scheduled this work session on December 12, 2017, to afford itself enough time to issue a final order in advance of the December 26, 2017 statutory decision deadline. The Commission has routinely interpreted statutory deadlines to benefit the applicant or petitioner, and that waiver of these deadlines can be provided only by the applicant or petitioner. *Cf. In re L&L Site Services, LLC*, Docket T-15.23.PCN, Order 7477 ¶ 10 (Mar. 22, 2016) ("The Applicant agreed to waive the 180 day decision requirement found in Mont. Code Ann. § 69-12-323 . . . ."); *In re MTSUN, LLC*, Docket D2016.12.103, Final Order ¶ 20 ("MTSUN waived the statutory deadline in this docket, allowing the Commission to extend its deadline to issue a final order, but limited that waiver to a deadline no later than July 21, 2017."). Since NorthWestern is a respondent party in this docket, it cannot waive the statutory deadline so as to provide the Commission sufficient time

[1] *Available at* <http://psc.mt.gov/docs/agendas/2017agenda/U20171212.pdf>.

to consider NorthWestern's Reply Brief to the MCC's Response Brief and grant other parties any additional process to address this issue.

10. Second, NorthWestern is not the party with the burden of proof in this docket. Mont. Code Ann. § 26-1-402; *Mont. Envtl. Info. Ctr. v. Mont. Dept. of Envtl. Quality*, 2005 MT 96, ¶ 14, 326 Mont. 502 ("the party asserting a claim for relief bears the burden of producing evidence in support of that claim."). Traditionally, parties with the burden of proof are afforded the opportunity to file both initial and reply briefs. New Colony elected to assert this right in this docket. Hr'g Tr. at 486:19–25.

11. Finally, to the extent the Commission has considered MCC's substantive arguments that NorthWestern finds objectionable, the Commission merely takes this as putting NorthWestern on notice of the MCC's concerns of recovering these costs in a future proceeding. *Infra* ¶ 91; *see also Geil v. Missoula Irrigation Dist.*, 2002 MT 269, ¶ 58, 312 Mont. 320, 59 P.3d 398 ("Notice sufficiently comports with due process if it is reasonably calculated, under all circumstances, to inform parties of proceedings which may directly affect their legally protected interests."). This approach is appropriate given that the Commission has previously expressed concerns over a more comprehensive evaluation of intermittent resource integration requirements. *In re NorthWestern Energy's 2015 Electric Supply Procurement Plan*, Docket N2015.11.91, Commission Comments 13 (Feb. 2, 2017). This docket, however, does not concern recovery of NorthWestern electricity supply costs. *See* Mont. Code Ann. §§ 69-8-210, 69-3-301 to -307. Any recovery of these costs will be addressed in a future rate case or tracker proceeding. Therefore, NorthWestern's Motion for Leave to File a Brief is DENIED.

DISCUSSION AND FINDINGS OF FACT

12. The Public Utility Regulatory Policies Act ("PURPA"), enacted in November 1978 as part of the National Energy Act, establishes requirements for utility purchases of electric energy and capacity from qualifying facilities ("QFs"). Federal Energy Regulatory Commission ("FERC") regulations implementing PURPA require utilities to purchase all energy and capacity provided by QFs at rates that reflect the utility's full avoided cost. FERC's rules define avoided cost as "the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source." 18 C.F.R. § 292.101(b)(6).

13. FERC rules provide QFs the option of selling energy and capacity to a utility "as available," in which case the rates must reflect the utility's avoided cost calculated at the time the QF delivers those products, or pursuant to a "legally enforceable obligation," in which case the rates must reflect, at the QF's option, either avoided costs calculated at the time of delivery or avoided costs calculated at the time the obligation is incurred. 18 C.F.R. § 292.304(d).

14. The Commission must resolve whether New Colony incurred an LEO when, on May 24, 2017, it signed and submitted to NorthWestern a contract containing a price of $43.63/MWh for energy and capacity to be delivered for a 25-year period. If New Colony did not incur an LEO, the Commission must determine appropriate rates and conditions for NorthWestern's purchase of New Colony's output, including the duration of the purchase obligation, i.e., contract length.

Legally Enforceable Obligation

15. New Colony asserts that it incurred an LEO on May 24, 2017, when it submitted a unilaterally executed PPA to NorthWestern. New Colony's PPA contains a price of $43.63/MWh for energy, capacity, and environmental benefits delivered to NorthWestern over a 25-year term. New Colony Initial Post Hr'g Br. 7 (Nov. 20, 2017). New Colony argues that the prong of the Commission's LEO test that requires a PPA price to be consistent with avoided cost creates barriers to QFs because, unless the QF accedes to what NorthWestern says its avoided cost is, the QF must petition the Commission to determine the avoided cost. *Id.* at 13. New Colony contends that NorthWestern does not—and has no incentive to—negotiate in good faith because it faces no consequences for any delay in the date on which an LEO is incurred.

16. NorthWestern argues that New Colony has the burden of proof to show that it incurred an LEO. NorthWestern Response Br. 4 (Dec. 1, 2017). It argues that New Colony does not point to any evidence that its PPA price of $43.63/MWh is consistent with NorthWestern's avoided cost. NorthWestern asserts that New Colony did not incur an LEO because its PPA does not meet two of the four prongs of the Commission's *Whitehall Wind* test: 1) its price of $43.63/MWh is not consistent with NorthWestern's avoided costs; and 2) it does not contain sufficient guarantees for performance. *See In re Whitehall Wind, LLC*, Docket D2002.8.100, Order 6444e ¶ 47 (Jun. 4, 2010).

17. MCC states that New Colony's PPA price of $43.63/MWh is not consistent with NorthWestern's avoided cost on May 24, 2017. MCC Response Br. 11 (Dec. 1, 2017). MCC

argues that the prong of the Commission's LEO test requiring a price consistent with NorthWestern's avoided cost makes sense because it prevents QFs from obligating a utility to purchase power at prices that exceed avoided cost. It adds that the fact that the Commission's LEO test may prevent some QFs from incurring LEOs at certain times does not render the test inconsistent with PURPA. *Id*. at 12 (citing *Exelon Wind I LLC v. Nelson*, 766 F.3d 380, 396-97 (5^{th} Cir. 2014)).

18. In its reply to the response briefs of MCC and NorthWestern, New Colony implies that because the U.S. Supreme Court has found that, because the Federal Government may regulate sales of energy from QFs, that the Federal Government, in this instance FERC, may prescribe a specific LEO test. "Clearly, Congress can pre-empt the States completely in the regulation of retail sales by electricity and gas utilities and in the regulation of transactions between such utilities and cogenerators." NCW Reply Br. to NWE 6 (Dec. 8, 2017) (citing *FERC v. Mississippi*, 456 U.S. 742, 759 (1982)).

19. The Commission finds that New Colony has failed to establish an LEO. If a QF fails to satisfy one or more of the four prongs of the Commission's *Whitehall Wind* test, an LEO has not been incurred. *In re MTSUN, LLC*, Docket D2016.12.103, Final Order 7535a ¶¶ 29–42 (Jul. 21, 2017). The Commission has repeatedly affirmed, as recently as November 27, 2017, that its *Whitehall Wind* test remains fully intact. *In re MTSUN, LLC*, Docket D2016.12.103, Order on Reconsideration 7535b ¶¶ 11–20 (Nov. 27, 2017). As described below, the Commission finds that NorthWestern's avoided cost for New Colony, as of May 2017 and based on the Commission's current avoided cost estimation practices, is $26.74/MWh for a 25-year contract—the duration of the LEO New Colony asserts that it incurred. Given the significant difference between this avoided cost estimate and New Colony's asserted LEO price of $43.63/MWh, the Commission concludes that the price in the asserted LEO is not consistent with NorthWestern's avoided cost in May 2017. Therefore, New Colony did not incur an LEO.

20. New Colony Wind's reliance on *FERC v. Mississippi* to assert that FERC has authority to arrive at LEO tests for states is mistaken. *FERC v. Mississippi* concerned, in part, a question of whether PURPA engaged in improper commandeering of state government. *FERC v. Mississippi*, 456 U.S. 742, 763–66 (1982). The effect of *FERC v. Mississippi* is the opposite of what New Colony suggests. Congress has merely required that "the States enforce standards promulgated by FERC" rather than prescriptive or rigid approaches for any of the issues that may

face a state commission implementing PURPA. *Id.* 456 U.S. at 759. This perspective is further supported by a subsequent case concerning state commandeering:

> [L]ater opinions of ours have made clear that the Federal Government may not compel the States to implement, by legislation or executive action, federal regulatory programs. In *Hodel v. Virginia Surface Mining & Reclamation Assn., Inc.*, 452 U.S. 264, 69 L. Ed. 2d 1, 101 S. Ct. 2352 (1981), and *FERC v. Mississippi*, 456 U.S. 742, 72 L. Ed. 2d 532, 102 S. Ct. 2126 (1982), we sustained statutes against constitutional challenge only after assuring ourselves that they did not require the States to enforce federal law. In *Hodel* we cited the lower court cases in *EPA v. Brown*, but concluded that the Surface Mining Control and Reclamation Act did not present the problem they raised because it merely made compliance with federal standards a precondition to continued state regulation in an otherwise pre-empted field, *Hodel*. In *FERC*, we construed the most troubling provisions of the Public Utility Regulatory Policies Act of 1978, to contain only the "command" that state agencies "consider" federal standards, and again only as a precondition to continued state regulation of an otherwise pre-empted field. We warned that "this Court never has sanctioned explicitly a federal command to the States to promulgate and enforce laws and regulations."

Printz v. United States, 521 U.S. 898, 925-26 (1997) (internal citations omitted). While it might be possible that the Federal Government *could* regulate and pre-empt the relationship between the retail utilities and QFs, PURPA does not require states to do more than "consider" federal standards. If the Federal Government were to require the states to carry out federal policy beyond state commissions considering federal standards, that regulatory regime might run afoul of the prohibition on state commandeering. *Id.* 521 U.S. at 929 (citing *FERC*, 456 U.S. at 761–762). Therefore, New Colony's implication that *FERC v. Mississippi* requires the states to implement specific federal policy—here, a particular LEO test—misses the obvious thrust and significance of these cases. In accordance with the Commission's authority to establish an LEO test, it reiterates its invitation to "any interested party to initiate rulemaking to address these concerns." *In re NorthWestern Energy's Application for Approval of Avoided Cost Tariff Schedule QF-1*, Docket D2016.5.39, Order on Reconsideration 7500d ¶ 75 (Nov. 24, 2017).

Contract Length

21. The subject of contract length is addressed in this docket in prefiled testimony, discovery, and hearing testimony. Prefiled testimony includes responses to the Commission's Notice of Additional Issues, which requested the parties' perspectives on legal, economic, financial, and other aspects of contract length determination. Notice of Additional Issues (Oct. 13, 2017).

22. New Colony describes the effect of contract length on the financing of a wind project as "significant" and argues that the idea of the Commission adopting a 10-year contract with a five-year adjustment, as it had done in the NorthWestern QF-1 docket, would make it impossible for QF projects to obtain financing and effectively kill QF development in Montana, thereby violating the intent and goals of PURPA. Test. Roger Schiffman 30 (Jun. 28, 2017). New Colony proposes that the Commission establish contract lengths for QFs of 20-25 years.

23. New Colony provided a memo from TransAlta Corporation, owner of the New Colony project, which states that, without a long-term agreement, securing financing for a project is not achievable. Data Response (DR) PSC-021a, TransAlta Contract Length Memorandum (Aug. 10, 2017). TransAlta asserts that longer financing terms allow for greater leverage on the project and enable the debt to be amortized over a period consistent with the economic life of the asset. TransAlta further states that post-contract risk facing a developer is exacerbated in jurisdictions like Montana because merchant markets are not readily accessible.

24. TransAlta explains that the New Colony project will be financed through a tax equity investment and that the preference of tax equity investors is for a contract length of 15 years or longer. *Id*. at 2. TransAlta ultimately suggests that the Commission return to a practice of setting a QF's contract length at 25 years.

25. New Colony estimates the impact of contract length on avoided cost by utilizing two different energy price forecasts—one developed by the Northwest Power and Conservation Council ("NPCC") in its 7th Power Plan and one utilizing a price strip developed by the Intercontinental Exchange ("ICE"), as used by NorthWestern, and then levelizes the avoided energy purchases from New Colony over 10, 15, 20, and 25 years. Additional Issues Test. Roger Schiffman 2-3 (Oct. 25, 2017). The results show higher avoided costs with longer contract lengths (because the long-term projections reflect annual price escalation), varying from $41.58/MWh to $51.44/MWh (using NPCC escalators) and $28.50/MWh to $34.51 (ICE escalators) for 10-year and 25-year contracts, respectively.

26. New Colony identifies two specific issues with regard to contract length and the viability of a wind project: one, the contract length required by lenders, and two, the contract length needed by the equity investor in order for the project to produce a sufficient rate of return. Additional Issues Test. Kelly Wist 3 (Oct. 25, 2017). Optimum financing occurs when a contract term matches the useful life of the asset.

27. At a minimum, New Colony considers a fixed-price contract of 20 years necessary to secure cost-effective financing for QF projects, while best outcomes are achieved at 25 years. *Id*. at 4. The contract pricing, term of the contract, and credit quality of the off-taker, i.e., purchaser, are the most crucial factors in determining the risk level of a project.

28. NorthWestern contends that New Colony fails to provide credible evidence supporting why a 25-year contract term is more appropriate than a 10-year term. Test. John Bushnell 30–31 (Sep. 7, 2017). NorthWestern states that New Colony witness Roger Schiffman admits to not having provided financing for QF development.

29. NorthWestern witness Andrew Redinger states that banks will provide financing for any contract involving an investment-grade PPA irrespective of its length, adding that the contract term has more impact on the amount of debt that can be raised. Additional Issues Test. Andrew Redinger 4 (Oct. 25, 2017).

30. The shorter the contract length, the less bank debt a project can raise against the project's cash flows, meaning more equity is required to complete the financing of the project. *Id*. at 4–5. For those shorter terms, developers must contribute more equity, which will decrease their returns on the equity for the project. In much of the United States, where the wind blows roughly 30% of the time and electricity prices range from mid-$20s/MWh to mid-$30s/MWh, contracts of 15 or more years are necessary to provide sufficient equity returns to the developer. *Id*. at 5. NorthWestern witness Redinger observed that several factors, including wind production capacity, decreasing generation technology costs, and less expensive debt, contribute to what a PPA's length should be, but he generally thinks PPAs should be 15 years or more. Hr'g Tr. 206:1–14 (Oct. 31, 2017).[2]

31. MCC argues that the 25-year contract length proposed by New Colony is excessively risky for ratepayers because it locks consumers into paying rates based in part on fuel and energy price forecasts that would be 25 years old at the expiration of the contract. Test. Jaime Stamatson 12 (Sep. 7, 2017). MCC asserts that, beyond the near-term forward strip of the forecasts, forecasts are simply escalated by inflationary expectations of natural gas prices, thus basing a forecast upon a forecast and compounding the error inherent in each forecast.

[2] Pages 1 through 300 of the hearing transcript pertain to October 31, 2017, which was the first day of the hearing. Pages 301 through 487 of the hearing transcript pertain to November 1, 2017, which was the second day of the hearing.

32. MCC argues for shorter contract lengths to mitigate forecast risks and help ensure that avoided cost estimates are more accurate throughout the life of the contract and that ratepayers remain indifferent between sources of supply. *Id*.

33. In its Notice of Additional Issues, the Commission specifically requested "responses to these questions from third-party or independent sources with firsthand experience in the relevant subject matter." Notice of Additional Issues 2 (Oct. 13, 2017). The Commission finds New Colony's witness Wist less credible on this issue because he is employed by TransAlta Corporation and has an obvious incentive to advocate for a longer-term contract length for the New Colony project. Similarly, a question about relevant financial experience may be warranted with regard to New Colony witness Schiffman, who argues for longer contracts. NorthWestern witness Redinger appears to possess appreciable experience in QF project financing, and he expressed that QF contracts should be 15 years or longer. The Commission notes that NorthWestern's witness Redinger is the only independent individual— i.e., not directly employed by the entity he was testifying on behalf of—that spoke on appropriate contract length; accordingly, the Commission gives more weight to his testimony. Additionally, the Commission has made a number of recent decisions finding that 15 years is the appropriate length of contract for various QF projects. *In re MTSUN, LLC*, Docket D2016.12.103, Order on Reconsideration 7535b ¶¶ 21–48 (Nov. 29, 2017); *In re NorthWestern Energy's Application for Approval of Avoided Cost Tariff Schedule QF-1*, Docket D2016.5.39, Order on Reconsideration 7500d ¶¶ 14–30 (Nov. 24, 2017). As a result of this precedent and persuasive testimony provided by Mr. Redinger, the Commission implements a 15-year contract length here.[3]

Avoided Cost Estimate

34. New Colony's proposal for estimating NorthWestern's avoided cost deviates from the Commission's current practice by: 1) disregarding the Long-1 method, instead relying on forecast wholesale market prices to approximate avoided energy costs in all time periods; and 2) relying on a market forecast developed by NPCC. In the following analysis, the Commission

[3] Additionally, the Commission has provided guidance that future NorthWestern procurements will be subject to symmetrical treatment of QF resources. *See In re MTSUN, LLC*, Docket D2016.12.103, Order on Reconsideration 7535b ¶¶ 102–103 (Nov. 29, 2017); *In re NorthWestern Energy's Application for Approval of Avoided Cost Tariff Schedule QF-1*, Docket D2016.5.39, Order on Reconsideration 7500d ¶¶ 76–94, 116 (Nov. 24, 2017). These findings have been incorporated in the Commission's comments on NorthWestern's 2015 Procurement Plan docket. *See In re NorthWestern Energy's 2015 Electric Supply Procurement Plan*, Docket N2015.11.91, Mont. Pub. Serv. Comm'n Supplemental Comments (Dec. 20, 2017).

ignores Long-2 issues because, consistent with its current practice, no party proposed actual or demonstrable avoided cost estimates that incorporate an adjustment for Long-2 situations.[4] Similar to the Commission's previous reluctance to implement a Long-1 adjustment, the Commission will not impose a Long-2 adjustment until NorthWestern reliably shows that it is treating its own resources consistently with this proposed adjustment to QF resources. *See,* e.g., *In re Crazy Mountain Wind, LLC,* Docket D2016.7.56, Order 7505b ¶ 78 ("The Ryan Dam model, meanwhile, does not make the Long-2 adjustment for the NorthWestern-owned resource, instead assigning it the market price; this is another reason for the Commission to reject the Long-2 adjustment."). Accordingly, NorthWestern should not attempt to negotiate with QFs asserting a Long-2 adjustment until it can demonstrate to both QFs seeking an LEO and the Commission that it is valuing its own resources in this manner. Failure to adhere to this directive regarding the Long-2 in negotiations with QFs will be considered to be a violation of the Commission's previous directive to provide "a reasonably transparent avoided cost calculation with a complete explanation of methods and assumptions in a reasonable amount of time." *In re Greycliff Wind Prime LLC*, Docket D2015.8.64, Order 7436d ¶ 22 (Sep. 16, 2016)).

Long-1 Method

35. New Colony argues that the avoided energy costs in Long-1 situations should be based on forecast wholesale market prices because the purchase of its energy in such situations will not cause NorthWestern to reduce the output of its dispatchable resources, and because paying New Colony less than the market price deprives it of the value of its energy. Test. Roger Schiffman 17 (Jun. 28, 2017). It further argues that basing the avoided cost on anything less than the market price discriminates against New Colony in favor of NorthWestern's shareholders and customers, even if the same method is used to evaluate prospective utility resources, because New Colony's rate would be less than the full avoided cost. *Id*. In addition, New Colony argues that the Commission's prior determination that fixed-price QF purchases in Long-1 situations impose market risks on a utility and its customers is flawed because it is based on a one-sided risk assessment. Test. Schiffman at 18 (Jun. 28, 2017); *see also In re Greycliff Wind Prime, LLC,* Docket D2015.8.64, Order on Reconsideration 7436e, ¶¶ 9–18 (Nov. 4, 2016) (previously

[4] NorthWestern also provided an avoided cost calculation including the Long-2 adjustment and explained why it supports the adjustment, but acknowledged that the Commission's current practice is to calculate avoided costs without the adjustment. Test. Hansen 15-16.

rejecting the Long-1 adjustment). According to New Colony, if NorthWestern incurs risk in re-selling New Colony's energy, it also avoids risk by purchasing New Colony's energy instead of making market purchases. Test. Schiffman at 18 (Jun. 28, 2017).

36. NorthWestern responds that avoided costs in Long-1 situations should be based on the variable cost of the last-dispatched resource because avoided cost should be calculated in relation to customer load requirements. Test. Bushnell at 12. It also states that customers should not incur market risk associated with remarketing energy delivered by New Colony that is not needed to serve load. NorthWestern disputes New Colony's contention that the Long-1 method is discriminatory. NorthWestern asserts that it uses the same method to evaluate other resources, and cites as examples recent evaluations of upgrades at the Ryan Dam facility and Community Renewable Energy Project bids. *Id*. at 13; Test. Luke Hansen 14 (Sep. 7, 2017).

37. MCC argues that avoided energy costs in Long-1 situations should be based on the variable cost of the last-dispatched resource, adding that such a method is reasonable and mitigates risks to customers associated with remarketing excess energy. Test. Stamatson 6 (Sep. 7, 2017).

38. In this docket, the Commission continues the practice of basing avoided energy costs in Long-1 situations on the variable cost of NorthWestern's highest-cost, economically-dispatched resource. The Commission's decision to account for risk imposed on customers from fixed-price QF purchases in Long-1 situations is not flawed, as New Colony contends. Unlike a situation where a utility projects a need to procure additional energy supply to meet projected load requirements, in which there is a risk tradeoff in the decision involving whether to procure the energy at uncertain future market prices or mitigate that uncertainty through, for example, a fixed price PPA, acquiring fixed-price energy supply when a surplus energy supply situation is already projected to exist exposes customers to additional risk. In other words, in Long-1 situations, the risk is, in fact, one-sided. The risk stems from the fact that future market prices are uncertain and, but for the requirement to purchase New Colony's energy, NorthWestern would attempt to avoid adding to the surplus supply situation through least-cost planning processes. Said differently, in the context of the peaker method, a fixed-price purchase from a QF in Long-1 situations does not avoid market risk because NorthWestern would not otherwise make market purchases in Long-1 situations. MCC states that it is risky and not in customers' interest for the utility to be long. Hr'g Tr. 434 (Nov. 1, 2017). The Commission agrees and finds that QF rates should not incentivize QF resource acquisition that exacerbates long situations.

39. In *MTSUN*, the Commission adopted the peaker method over the proxy method due to its ability to account for the impact that large QF resource acquisitions would have on the calculation of avoided costs. *In re the Petition of MTSUN for QF Contract Rates and Conditions*, Docket D2016.12.103, Or. 7535a ¶ 49. However, New Colony's proposal to base avoided energy costs on projected market prices in *all* time periods results in QF rates that are independent of, and therefore insensitive to, the status of NorthWestern's resource portfolio. If New Colony's method, including use of NPCC's wholesale price forecast, which could remain static for several years, were adopted, rates for large QFs of similar generating technology, e.g., wind, would become standardized and decoupled from NorthWestern's actual need for energy. Hr′g Tr. at 64 (New Colony's avoided energy cost calculation is a function of two variables: the wholesale price forecast and the QF's output).

40. Traditionally, with the peaker method, avoided energy costs are based on the *utility's* marginal energy cost. New Colony's proposal effectively calculates avoided cost in relation to *regional* system marginal energy costs and load requirements (because the wholesale energy price forecast New Colony proposes to use as a basis for avoided energy costs reflects the modeled economic dispatch of all regional resources to serve regional load requirements). *Seventh Northwest Conservation and Electric Power Plan*, Northwest Power and Conservation Council, Ch. 8, pp 8-3 (Feb. 2016). New Colony justifies its approach, in part, by suggesting that interpreting PURPA and FERC's regulations requires a recognition that today's regional wholesale market differs from the situation of the 1980s, when there was less of a wholesale market for energy. NCW Initial Post Hr'g Br. at 27-28. If a regional perspective is used to estimate avoided *energy* costs, it would seem reasonable to also use a regional perspective to estimate avoided *capacity* costs. If, as New Colony's method suggests, *regional* system costs and loads, in the form of market prices, are a reasonable basis for avoided energy costs, then, for its approach to be internally consistent, *regional* capacity requirements and avoidable capacity costs, rather than NorthWestern system specific requirements and costs, would seem to be the appropriate basis for avoided capacity costs. That would appear to require reflecting the region's adequate capacity in the near-term, something New Colony does not propose.

41. New Colony has not presented evidence in this case which supports deviating from the Commission's current practice. Therefore, the Commission will continue to base NorthWestern's avoided energy costs in Long-1 situations on the highest variable cost from NorthWestern's dispatchable resources.

Market Price Forecast

42. New Colony proposes to adopt the forecast of wholesale electricity market prices developed by NPCC in its 7th Power Plan, or, alternatively, adopt the escalation rates from that forecast. Test. Schiffman 24 (Jun. 28, 2017). New Colony argues that evolving fuel markets, environmental compliance policies, and renewable resource expansion policies in the Pacific Northwest will impact heat rates and electricity market prices and that NPCC's forecast captures those fundamental and structural changes better than a forecast based on natural gas prices at Henry Hub, a natural gas market hub located in Louisiana. *Id.* at 25; Hr'g Tr. 115:22–116:5.

43. New Colony's proposal to adopt NPCC's electricity price forecast results in an all-hours avoided energy cost of $48.32/MWh. Test. Schiffman 27 (Jun. 28, 2017). Alternatively, the NPCC forecast implies an annual average escalation rate of 4.68% after 2020, compared to 2.73% for the EIA/AEO natural gas forecast, and results in an all-hours avoided energy cost of $32.59/MWh. *Id.*

44. NorthWestern opposes New Colony's proposals, contending that the Commission's current practice is sound because the forward market price strips reflect actual market expectations in the short term and because EIA/AEO escalation rates reflect an annually updated, publicly available, fundamentals-based forecast. NorthWestern argues that the NPCC forecast is outdated (it was published in the fall of 2015). Test. Hansen 10 (Sept. 7, 2017). NorthWestern adds that the NPCC forecast of prices for 2016, 2017, and 2019 is 28% higher than actual prices, 35% higher than actual year-to-date prices, and 50% higher than current forward prices, respectively. Hr'g Tr. at 346:15–25.

45. The Commission finds some merit in New Colony's arguments for using a regionally developed, fundamentals-based wholesale electricity price forecast in the context of the peaker method. Although regional wholesale electricity prices are highly correlated with natural gas prices, other fundamental factors affecting regional market price are not captured in the Commission's current practice. However, a practical impediment to using the NPCC forecast is the infrequency with which NPCC updates it.

46. In addition, New Colony acknowledges concerns about the potential for changes in fuel prices between releases of comprehensive power plans. Hr'g Tr. at 60:24–61:11. NPCC's regional power plans are issued on a five-year cycle, and New Colony could not say whether or how often NPCC updates the forecast between plans. DR PSC-013. Although New Colony argues that the use of escalation rates from the NPCC forecast would capture short-term market

expectations and the long-term structural changes anticipated in the NPCC forecast, the Commission questions the assumption that the fundamental factors intrinsic to the NPCC forecast will remain unchanged between the release dates of comprehensive power plans. *Id*; Hr'g Tr. at 63:9-25.

47. Evidence also indicates that the NPCC forecast incorporates fundamental changes related to state policies that address carbon emissions. Hr'g Tr. at 61:22–62:5. Therefore, adopting the NPCC forecast may also require addressing whether New Colony's contract should convey to NorthWestern any renewable energy credits ("RECs") from the project. The Commission finds that the record is not well developed in that regard.

Avoided Capacity Cost

48. There are no material disputes between parties in this case regarding the calculation of avoided capacity costs. New Colony and NorthWestern each calculate avoided capacity costs in a manner consistent with the Commission's current practice for wind QFs, *i.e.*, the assignment of a 5% capacity contribution factor applied to 25-year annualized capital costs and fixed operation and maintenance expenses for an AERO unit. Test. Schiffman 28 (Jun. 28, 2017); Test. Bushnell 24–26 (Sep. 7, 2017). MCC accepts that approach. Test. Stamatson 8 (Sep. 7, 2017).

49. New Colony and NorthWestern differ in their approaches to the payment of avoided capacity costs. New Colony proposes a capacity payment of $1.77/MWh, applied to all hours of production.[5] NorthWestern proposes a capacity payment of $7.99/MWh, paid during peak hours, which is consistent with the Commission's current practice. *In re MTSUN, LLC,* Docket D2016.12.103, Order 7535a ¶ 76 (July 21, 2017); *In re Crazy Mountain Wind, LLC,* Docket D2016.7.56, Order 7505b ¶ 101 (Jan. 5, 2017).

50. The Commission maintains its current practice and adopts an avoided-cost-based capacity rate of $7.99/MWh, to be paid in NorthWestern's peak hours.

[5] The Commission notes New Colony initially calculated a capacity payment as if for a 25 MW project; however, the actual size of the project is 23.1 MW, which results in a capacity payment of $1.77/MWh if applied to New Colony's expected annual production. *See* Test. Schiffman 28 (Jun. 28, 2017); DR NWE-008, MCC-001, Test. Stamatson at 8 (Sep. 7, 2017).

Carbon Cost

51. New Colony argues for inclusion of a carbon cost adjustment to the avoided energy cost. It asserts that it would be inappropriate and discriminatory to depart from the carbon cost adjustment adopted in *Crazy Mountain* in March 2017. Test. Schiffman 20–22 (Jun. 28, 2017); NCW Initial Post-Hr’g Br. at 17–21; NCW Reply Br. to NWE at 25–27; NCW Reply to MCC at 3–7. According to New Colony, there is a probability that carbon regulation will affect regional electricity markets within the next decade, as indicated by policies in California, Washington, and the Province of Alberta. Test. Schiffman 21–22 (Jun. 28, 2017).

52. NorthWestern states that it did not incorporate a carbon cost adjustment into its avoided energy cost estimates, consistent with current Commission practice. Test. Bushnell 33–34 (Sep. 7, 2017).

53. MCC argues against incorporating a carbon cost adjustment in avoided energy cost estimates. Test. Stamatson 9–10 (Sep. 7, 2017). It contends that PURPA does not require avoided costs to reflect monetization of environmental benefits. It further testifies that, because a carbon price does not currently exist in Montana, and no evidence indicates that one will materialize in the foreseeable future, customers should not be burdened with additional, highly speculative costs. MCC recommends that New Colony retain rights to the project’s RECs, which allows it to separately negotiate for the sale of renewable attributes with NorthWestern or other entities. MCC Resp. Br. at 3–4.

54. The Commission has recently observed that trends in the appropriate levels of carbon costs are predictably common in cases decided at the same time:

> In deciding this matter roughly contemporaneously, with a similar if not identical set of facts before it, the Commission adopts those same findings here. *Cf. Waste Mgmt. Partners v. Mont. Dep't of Pub. Serv. Regulation*, 284 Mont. 245, 257-58, 944 P.2d 210, 217-18 (1997) (noting that unless the factual landscape between two administrative proceedings has differed significantly, agencies should follow its precedent or provide a reasoned analysis explaining its departure). The record evidence concerning the likelihood of federal regulation imposing carbon costs are the same in these two proceedings. *Compare* Order 7500c ¶¶ 72, 75–79 (finding persuasive MCC’s argument that QF retention of RECs should mitigate risk imposed on ratepayers and allow for potential recovery of future carbon costs) *with* Test. Stamatson at 11–13 (arguing the same). Additionally, the Commission evaluates the likelihood of carbon costs coming to fruition through the lens of its own “experience, technical competence, and specialized knowledge.” Mont. Code Ann. § 2-4-612(7) (“The agency's experience, technical competence, and specialized knowledge may be utilized in the evaluation of evidence.”) [. . . .] Because the Commission has the same record

> evidence, experience, technical competence, and specialized knowledge in these two proceedings, it arrives at the same result regarding carbon costs.

In re MTSUN, LLC, Docket D2016.12.103, Order on Reconsideration 7535b ¶ 78 (Nov. 29, 2017).

55. Because New Colony has not presented evidence in this case that substantively differs from evidence provided to the Commission in prior cases, the Commission will not depart from its current practice of not including carbon costs as an adjustment to avoided cost. The Commission agrees with MCC that New Colony should keep the rights to RECs from the project. Additionally, with the understanding that the U.S. Environmental Protection Agency ("EPA") plans on repealing the Clean Power Plan, *see* Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035 (proposed Oct. 16, 2017) (to be codified at 40 C.F.R. pt. 60), the Commission uses its expertise to find that regulations resulting in a measurable carbon cost will not come to fruition. *See also In re Crazy Mountain Wind, LLC*, Docket D2016.7.56, Order on Reconsideration 7505c ¶ 41 (Apr. 18, 2017) (identifying the particular expertise of state public utility and service commissions to track and adopt carbon costs in regulated utility energy costs).

Interconnection Cost

56. New Colony asserts that it is responsible for interconnection costs only between its generation site and the project's point of delivery onto NorthWestern's system. Test. Schiffman 23 (Jun. 28, 2017). New Colony bases its position on network upgrade costs—including both interconnection network upgrade costs and transmission service upgrade costs—on FERC's decision in *Pioneer Wind Park I*, as well as FERC Orders 2003 and 2006. DR PSC-022 (a) (Aug. 10, 2017); *Pioneer Park Wind I*, 145 FERC P. 61, 215, 62165, p. 23, 38 (2013). New Colony disputes NorthWestern's "but for" approach to the assessment of network upgrade costs, which would require a QF to pay for any upgrade costs the utility would not incur but for the QF's interconnection. Hr'g Tr. at 216:8–17.

57. NorthWesten argues that, in order to accept the full output of the New Colony project, it will incur interconnection costs on its side of the point of interconnection and costs to upgrade its transmission system that it otherwise would not incur but for the New Colony project. Test. Bushnell 19–24 (Sep. 7, 2017).

58. NorthWestern maintains that New Colony is responsible for interconnection and transmission upgrade costs that are required for NorthWestern to deliver New Colony's energy to

NorthWestern's load, and that those costs should be reflected as deductions from avoided cost estimates used to set the final rate. Test. Bushnell 19 (Sep. 7, 2017); Hr'g Tr. at 216: 1–7. NorthWestern argues that its 2015 Plan found no need for additional intermittent resources, thus New Colony will not offset any of NorthWestern's planned interconnection costs. Test. Bushnell at 20.

59. Despite NorthWestern's belief that New Colony will not offset any planned interconnection costs, the utility derives a method to quantify the interconnection costs that New Colony could allow NorthWestern to avoid in theory. *Id.* at 21–23. It explains that the EOP in the 2015 Plan calls for the addition of three 18-MW Reciprocating Internal Combustion Engine ("RICE") units in 2019. The RICE units have a 95% availability during NorthWestern's peak load hours.

60. NorthWestern calculates the peak load capacity of the RICE units to be 51.3 MW (3 units x 18 MW x 95% peak availability) and the peak load capacity contribution of New Colony to be 1.16 MW (21.3 MW x 5% capacity contribution). NorthWestern asserts that the ratio of the peak load capacity of New Colony to the peak load capacity of the three RICE units infers that New Colony could offset 2.25% of the capacity needed from the RICE units (1.16 MW ÷ 51.3 MW).

61. In its 2015 Plan, NorthWestern's Transmission group provides a high-level cost estimate of $1,407,162 for the interconnection of three co-located RICE units. *NorthWestern Energy 2015 Electricity Supply Resource Procurement Plan* (Vol. 2, Ch. 6), Docket N2015.11.91 (Nov. 25, 2015). NorthWestern calculates the net present value revenue requirement of that cost to be $2,083,935. Test. Bushnell 22 (Sep. 7, 2017). NorthWestern applies the 2.25% offset capacity value from New Colony to determine that $46,919 represents the interconnection upgrade costs avoided by New Colony.

62. NorthWestern states that the 10-year levelized avoided interconnection cost payment to New Colony is $6,689/year, or $0.09/MWh, based on New Colony's expected production.[6] NorthWestern therefore proposes to credit $0.09/MWh to New Colony to account for the interconnection costs New Colony could allow NorthWestern to avoid, and charge New Colony with the full amount of the interconnection upgrade costs of its own project.

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[6] When calculated over a 15-year contract term, the levelized avoided interconnection cost payment to New Colony is $.07/MWh.

63. Based on its estimate of $2,301,205 for the interconnection upgrades associated with New Colony, NorthWestern calculates the net present value revenue requirement of New Colony's interconnection upgrade costs to be $3,418,794, or a 10-year levelized cost of $487,435/year. Applying that figure to New Colony's expected production results in a deduction to New Colony's avoided cost of $6.44/MWh.

64. MCC provided no testimony on the subjects of transmission system upgrades or the responsibility for the costs associated with such upgrades.

65. The Commission has previously found that QFs must pay the incremental difference between a utility's planned interconnection and transmission service network upgrade costs and those same categories of costs resulting from the QF project. Test. Bushnell 21 (Sep. 7, 2017); *In re Greycliff Wind Prime, LLC*, Docket D2015.8.64, Final Order 7436d ¶¶ 45–49, 68–69 (Sep. 13, 2016); *In re MTSUN, LLC*, Docket D2016.12.103, Final Order 7535a ¶ 85 (Jun. 29, 2017). NorthWestern has taken a step in the right direction in its attempt to quantify its avoidable interconnection upgrade costs in this docket.

66. However, when estimating the cost to interconnect the three 18-MW RICE units it used in its analysis, NorthWestern failed to include the additional cost of building natural gas pipelines to provide fuel to the RICE units. NorthWestern concedes that the Commission should consider the cost of those estimated natural gas transmission upgrades when it evaluates avoidable interconnection and network upgrade costs in the context of setting rates for a large QF contract. DR PSC-043(d) (Oct. 5, 2017).

67. NorthWestern's failure to include the cost of natural gas transmission upgrades when estimating avoidable interconnection costs of the RICE units renders its calculation of an avoided cost adjustment for interconnection upgrades inaccurate and inappropriate to use, as the Commission cannot identify the incremental difference between NorthWestern's planned interconnection upgrade costs and the upgrade costs of New Colony. The Commission finds that both components in the avoided cost calculation, i.e., the "Interconnection Value" of the New Colony project to NorthWestern's system and the "Interconnection Costs" assigned to New Colony, be valued at zero, and that NorthWestern be assigned responsibility for interconnection upgrade costs.[7]

[7] "Interconnection Value" and "Interconnection Costs" are found on lines 4 and 7, respectively, of NorthWestern's Exhibit NWE-3, "NorthWestern Energy—Avoided Costs for New Colony—15 years."

Transmission Service Network Upgrade Cost

68. New Colony proposes to interconnect with the NorthWestern's 100 kV Rainbow-Two Dot transmission line between Two Dot and Martinsdale. Test. Chelsea Loomis 3 (Sep. 7, 2017). A system impact study performed by NorthWestern for the New Colony project revealed that production from the project would cause, in certain scenarios, thermal overloads of the Rainbow-Two Dot line. At full output, New Colony would contribute to the thermal overloading of the line, but would not be the sole cause of the problem. *Id*. at 4.

69. While contract negotiations between New Colony and NorthWestern were ongoing, an analysis of transmission line safety required by the National Electrical Reliability Corporation (NERC) found that the Rainbow-Two Dot line's then-applicable capacity rating of 57 MVA was too high. *Id*. at 4–6; *see also* NorthWestern summary of NERC requirements and transmission line capacity analysis, Hr'g Tr. at 355–360. Subsequently, NorthWestern has embarked on a capital expenditure project to replace poles on the line, which is scheduled for completion in 2021 at a cost of $13.8 million. That project will still result in a lower line rating, i.e., 42 MVA, for the Rainbow-Two Dot line and will allow the utility to safely take only 12 MW of power on a firm basis from New Colony's nameplate generation capacity of 23.1 MW. The balance of New Colony's production would be accepted on an "as-available" basis. Test. Chelsea Loomis 4–6 (Sep. 7, 2017).

70. NorthWestern contends that a 57 MVA rating on the Rainbow-Two Dot line is necessary to accept the full output from New Colony and that the achievement of that rating would require an additional $2 million for the upgrade project currently underway. *Id*. at 6; Hr'g Tr. at 402:6–12. Arguing that the additional capacity on the Rainbow-Two Dot line is not needed to meet contractual transmission obligations and local area needs, NorthWestern concludes that the additional cost of $2 million should be the responsibility of New Colony and equates to a deduction of $5.80/MWh from New Colony's avoided cost. Test. Bushnell at 23–24 (Sep. 7, 2017).

71. The Commission finds shortcomings in the positions of both New Colony and NorthWestern regarding cost responsibility for transmission service upgrades. New Colony, for its part, argues that FERC, in *Pioneer Wind Park 1*, held that a QF's obligation to the purchasing utility "is limited to delivering energy to the point of interconnection by the QF with that

purchasing utility." DR PSC-022(b). However, in citing that FERC finding, New Colony did not include the footnote to the cited text, which reads, in part:

> This is not to suggest that the QF is exempt from paying interconnections costs, see 18 C.F.R. §§ 292.101(b)(6), 292.306 (2013), which may include transmission or distribution costs directly related to installation and maintenance of the physical facilities necessary to permit interconnected operations. 18 C.F.R. § 292.101(b)(6)(2013). Such permissible interconnection costs do not, however, include any costs included in the calculation of avoided costs. Id. Correspondingly, implicit in the Commission's regulation, transmission or distribution costs directly related to installation and maintenance of the physical facilities necessary to permit interconnected operation *may be accounted for in the determination of avoided costs* if they have not been separately assessed as interconnection costs.

Pioneer Wind Park I, LLC, 145 F.E.R.C. 61,215 n.73 (2013) (emphasis added).

72. From the FERC language above, the Commission concludes that transmission service upgrade costs associated with the New Colony project may be accounted for in the (Montana) Commission's determination of avoided cost for the New Colony project.

73. Though NorthWestern's assertion that New Colony has an obligation in the financing of necessary transmission service is grounded in relevant FERC direction, NorthWestern falls short in its methodology for measuring New Colony's proper cost responsibility.

74. NorthWestern argues that, in order for New Colony to defer transmission upgrade costs, which are location specific, NorthWestern would have to plan to build a generation facility of similar or larger capacity in a location close enough to New Colony to result in a similar transmission service request with similar system impacts. Test. Bushnell 23–24 (Sep. 7, 2017). Therefore, according to NorthWestern, the additional cost of $2 million to upgrade the Rainbow-Two Dot line to a rating sufficient to accept the full output of the New Colony project is entirely the responsibility of New Colony and translates into a $5.80 deduction from New Colony's avoided cost (on a 10 year levelized basis). *Id*. at 24. NorthWestern's approach rests on its assertion that avoided transmission upgrade costs for New Colony must be based on an equivalent NorthWestern-planned generation facility that is *location-specific*. This assertion fails to recognize that New Colony's energy and capacity may avoid certain transmission upgrade costs for an alternative NorthWestern-planned facility located elsewhere on NorthWestern's transmission system, with avoided costs depending on the transmission upgrade costs required for that avoidable facility at its particular location. Although it may be true that NorthWestern has no

plans for generation in the geographic area of New Colony, it may not be adduced that the New Colony project categorically would not avoid transmission upgrade costs that might occur elsewhere on NorthWestern's system.

75. It may have been reasonable, for example, for NorthWestern to estimate the avoided transmission service network upgrade costs for New Colony by providing cost estimates of the transmission upgrade costs for the three, co-located 18-MW RICE units that NorthWestern's 2015 Plan identifies for addition to NorthWestern's portfolio in 2019. *Id*. at 21–23. NorthWestern used those RICE units as a basis for calculating New Colony's obligation for interconnection network upgrade costs, a methodology that the Commission finds reasonable for that element of New Colony's total avoided cost. In the case of needed transmission upgrades, the estimated costs for the RICE units could be zero, or they could be significant.

76. Because NorthWestern has offered no transmission upgrade cost data for the site of the RICE units or for any other planned generation location on NorthWestern's system, the Commission has no basis on which to quantify an avoided transmission upgrade cost for the New Colony project. While it is reasonable for NorthWestern to observe that transmission upgrade costs for a generation project vary with the project's location, it is not reasonable to conclude, based on that information, that the avoided transmission upgrade cost for New Colony is zero. Therefore, absent relevant transmission upgrade cost data for any potential generation site on NorthWestern's system, the Commission finds that no deduction for avoided transmission service upgrade costs be made to New Colony's total avoided cost. However, the Commission finds NorthWestern's proposal to require $3 million of security reasonable, given the transmission investments NorthWestern has to make to accept the full output of the New Colony project. Test. Bushnell 10. On an annual basis during the contract term, NorthWestern must reduce the security requirement on a pro rata basis.

Mid-C Adjustment

77. New Colony describes the Mid-C adjustment proposed by NorthWestern as one-sided and discriminatory, in that NorthWestern proposes to adjust the avoided cost downward for Montana-to-Mid-C transmission costs it incurs in selling energy produced by a QF and that is unneeded to serve load, but does not account for transmission costs that are saved when NorthWestern purchases of QF energy are serving load. Test. Schiffman 19–20 (Jun. 28, 2017).

78. Further, New Colony asserts that NorthWestern overestimates the Mid-C adjustment in this docket when the adjustment is evaluated in the context of the actual, historical Mid-C transaction cost data that NorthWestern provided in the recent QF-1 docket, which established standard rates for QFs of 3 MW capacity or less. *Id*.; *In re NorthWestern Energy's Application for Approval of Avoided Cost Tariff Schedule QF-1*, Docket D2016.5.39, Final Order 7500c ¶¶ 42 (Jun. 22, 2017).

79. New Colony endorses the methodology for calculating the Mid-C adjustment based on historical purchase and sales data, but remains doubtful about the quantity and range of data that NorthWestern has offered in the New Colony docket. Hr'g Tr. at 89:25, 90:1–5, 102:5–25, 103:1–11.

80. NorthWestern disputes New Colony's characterization of NorthWestern's proposal, arguing that it applies the Mid-C adjustment not only to sales, but also to purchases. Test. Hansen 10 (Sep. 7, 2017). NorthWestern proposes a Mid-C adjustment of -$0.90/MWh for purchases and -$4.00/MWh for sales, basing those values upon recent purchase and sale transactions, dating from January 1, 2016, through May 9, 2017. *Id*. at 10, Ex.__LPH-1 (Sep. 7, 2017). NorthWestern opposes New Colony's proposal to utilize the Mid-C adjustment adopted by the Commission in the recent QF-1 docket, arguing that it was based on transactions as far back as 2013, and that only recent transactions should be considered for New Colony. NorthWestern provided transaction data for 17 energy purchases, made between January 1, 2016, and May 9, 2017, and for two energy sales, occurring on March 22, 2017, and April 18, 2017, respectively. *Id*. at 1–2.

81. MCC believes that the use of recent historical data to determine the Mid-C adjustment is superior to the use of transmission tariffs and associated line losses, as NorthWestern is often able to execute energy transactions in Montana or engage in power swaps instead of having to trade at Mid-C. Test. Stamatson 7 (Sep. 7, 2017). Such transactions do not reflect the full transmission costs and line losses incurred in straightforward Mid-C transactions. MCC believes that the adjustment should use the most current data available and cover a four- or five-year period. Hr'g Tr. at 472:1–21.

82. All parties to this docket support the concept of utilizing empirical data to determine the Mid-C adjustment, which is consistent with the Commission's current practice. However, differences exist, particularly between New Colony and NorthWestern, about the specific historical transaction data that should be used.

83. NorthWestern emphasizes the importance of using recent data. However, such data provided by NorthWestern is scant, comprising 17 purchase transactions and two sales transactions. The Commission finds reasonable MCC's recommendation to use four or five years of historical data, including the most recent available data. Therefore, the Commission combines the transaction data used in the QF-1 docket with the additional data NorthWestern provided in this case.

84. In addition, the Commission adopts separate and distinct Mid-C adjustment values for purchases and sales, respectively. Although this differs from the approach used in the QF-1 docket, it is more accurate in the context of the peaker method. Using this approach, the avoided energy cost would reflect the application of a Mid-C purchase adjustment when NorthWestern is in a short position, and a Mid-C sales adjustment when NorthWestern is in a Long-2 position. The separate purchase and sale adjustment values adopted here by the Commission are:

Short (purchase) position ($1.13)/MWh
Long-2 (sales) position ($3.04)/MWh

DR PSC-10a; Test. Hansen, Exh. LPH-1.

Integration Cost

85. New Colony relied on the Commission's findings in *Greycliff* as the basis for the integration costs included in the PPA offered to NorthWestern in May 2017.[8] However, New Colony does not address integration costs in its prefiled testimony.

86. NorthWestern estimates integration costs attributable to the New Colony project consistent with the Commission's historical practice. Test. Hansen 17–18 (Sep. 7, 2017).

87. MCC recommends that the Commission use the wind integration tariff applicable to standard rate-eligible QF projects. Test. Stamatson 13–14 (Sep. 7, 2017). MCC also recommends that the Commission specify in its final order that customers will be held harmless if actual integration costs exceed the estimated amount, because NorthWestern has not adequately studied its incremental cost to integrate intermittent resources. *Id.*

88. Given that New Colony did not provide argument or evidence in support of the integration costs embedded in the PPA it offered NorthWestern, and that those costs are not

[8] New Colony's response to Data Request PSC-019 indicates that it based its deduction for operating reserves on the Commission's findings in *Greycliff*. Although New Colony's witness does not address or identify the source of the regulation cost deduction, it appears New Colony also relied on the Greycliff decision to estimate regulation costs, as $0.14/MWh figure it uses matches the Commission decision in that docket.

consistent with the approach to estimating integration costs the Commission applied most recently, in *Crazy Mountain* and *MTSUN*, the Commission does not approve New Colony's proposed costs. MCC's recommendation essentially recommends an approach similar to that of New Colony, i.e., to use wind integration rates applicable to standard rate-eligible QFs, which is not consistent with the Commission's recent practice in *Crazy Mountain* and *MTSUN*.

89. Because NorthWestern's cost estimates reflect both the most recent practice of the Commission and at least some recent analysis of the regulation requirements of wind facilities, the Commission approves NorthWestern's cost estimates. However, the Commission also agrees with MCC that it may be reasonable to hold customers harmless from imprudently incurred integration charges, given the Commission's expressed concerns over a more comprehensive evaluation of intermittent resource integration requirements. *In re NorthWestern Energy's 2015 Electric Supply Procurement Plan*, Docket N2015.11.91, Commission Comments 13 (Feb. 2, 2017).

Summary of Avoided Cost Calculations

90. The table below compares the Commission's determination of the elements of avoided cost with the proposals of TransAlta, New Colony, and NorthWestern. The value of each cost element reflects the analysis in the preceding sections of this order.

New Colony Wind Avoided Cost Estimates				
	TransAlta/1	New Colony/2	NorthWestern/3	Commission/4
	$/MWh	$/MWh	$/MWh	$/MWh
Contract Length	25 years	25 years	15 years	15 years
Avoided Cost Components				
Avoided Energy Cost (net of Mid-C basis adj.)	$33.18	$49.53	$23.65	$23.62
Carbon Adder	$11.00	$0.00	$0.00	$0.00
Avoided Capacity Cost	$1.98	$1.77	$1.81	$1.81
Avoided Interconnection Cost	-	-	$0.07	-
Deductions				
Regulation costs	($0.14)	($0.14)	($0.24)	($0.24)
Spinning Reserves	($0.61)	($0.61)	($0.89)	($0.89)
Supplemental Reserves	($1.07)	($1.07)	($1.00)	($1.00)
Interconnection Upgrade Cost	-	-	($4.97)	-
Transmission Service Upgrade Cost	-	-	($4.47)	-
All-Hours Rate	$44.34	$49.48	$13.96	$23.30
Total Off-Peak Rate	$44.34	$49.48	$12.15	$21.49
Total On-Peak Rate	$44.34	$49.48	$20.14	$29.48

1/Avoided cost provided from TransAlta to NorthWestern (per Schiffman Direct Testimony P. 30)

2/ Based on a 25-year contract for 23.1 MW project. Source of reguation needs and reserve margins were not addressed by Mr. Schiffman. Staff mirrored regulation and reserve margins from TransAlta PPA.

3/ Exhibit__(NWE-3) based on 15-year contract with price strips as of August 28, 2017. Provided by Mr. Bushnell at hearing.

4/ Based on 15-year contract with price strips as of September 21, 2017 provided in response to PSC-035. Includes staff recommended Mid-C basis adjustment.

CONCLUSIONS OF LAW

91. All findings of fact that are properly conclusions of law are incorporated herein and adopted as such.

92. The Commission is invested with the "full power of supervision, regulation, and control" of public utilities. Mont. Code Ann. § 69-3-102. NorthWestern is a public utility subject to the Commission's jurisdiction. *Id.* § 69-3-101.

93. PURPA requires electric utilities to offer to purchase electricity from QFs at rates that are "just and reasonable to the electric customers of the electric utility and in the public interest," and which do not discriminate against QFs. 16 U.S.C. § 824a–3(b). "Nothing in [PURPA] requires any electric utility to pay more than the avoided cost for purchases." 18 C.F.R. § 292.304(a).

94. "[N]ot less often than every two years," NorthWestern must provide the Commission with specific "data from which avoided costs can be derived," including its "plan for the addition of capacity by amount and type, for purchases of firm energy and capacity, and for

capacity retirements for each year during the succeeding 10 years." 18 C.F.R. § 292.302(b). NorthWestern is required to submit such data "for use by the Commission in determining avoided costs and standard rates" within 30 days of filing a resource procurement plan. Mont. Admin. R. 38.5.1905(1).

95. "Avoided costs" are "the incremental costs as determined by the commission to an electric utility of electric energy or capacity or both which, but for the purchase from the qualifying facility or qualifying facilities, such utility would generate itself or purchase from another source." 16 U.S.C. § 824a-3(d); Mont. Admin. R. 38.5.1901(2)(a).

96. "[U]nder both state and federal law, rates for purchases from qualifying facilities must be reasonable and based on current avoided least cost resource data." *Whitehall Wind, LLC v. Mont. Pub. Serv. Comm'n*, 2010 MT 2, ¶ 21, 355 Mont. 15, 223 P.3d 907. The Court found that "[t]he PSC observed correctly that a utility must re-compute the long and short-term standard avoided cost rates after it submits an updated least cost plan filing." *Id.* ¶ 26. "The PSC further noted in its order that the rate for sales may not exceed the utility's avoided costs." *Id.* The Commission is required to set rates based on current avoided cost data and rates that exceed the utility's avoided cost are not just and reasonable or consistent with Montana law.

97. The Commission's "experience, technical competence, and specialized knowledge may be utilized in the evaluation of evidence." Mont. Code Ann. § 2-4-612. The Commission has "sufficient technical expertise in avoided cost determinations to evaluate evidence even when a party has not sponsored a particular conclusion based on that evidence." *In re Crazy Mountain Wind, LLC*, Docket D2016.7.56, Order on Reconsideration 7505c ¶ 27 (Mar. 6, 2017) (citing Mont. Code Ann. §§ 2-4-612(7), 69-3-601 to -604; *NorthWestern Corp. v. Mont. Dep't of Publ. Serv. Regulation*, 2016 MT 239, ¶¶ 14–23, 385 Mont. 33, 380 P.3d 787 (finding that "NRDC [Natural Resources Defense Council] and HRC [Human Resource Council] were incorrect to argue that there was no testimony regarding actual free ridership and spillover calculations" when the Commission had elicited testimony and record evidence through admitted data requests and questioning at the hearing)).

98. PURPA delegates broad authority to state regulatory commissions, which "play the primary role in calculating avoided cost rates and in overseeing the contractual relationship between QFs and utilities . . . ." *Indep. Energy Producing Assoc., Inc. v. Cal. Pub. Utilities Comm'n.*, 36 F.3d 848, 856 (9th Cir. 1994) (citing 16 U.S.C. § 824a-3(f)). "[I]f a qualifying small power production facility and a utility are unable to mutually agree to a contract for the sale of

electricity or a price for the electricity to be purchased by the utility," either the QF or the utility may petition the Commission to set terms and conditions, including rates for sales of energy and capacity. Mont. Code Ann. § 69-3-603 ("The commission shall determine the rates and conditions of the contract upon petition").

99. "When an electric utility is required to interconnect under section 292.303 of the Commission's regulations, that is, when it purchases the QF's total output, the state has authority over the interconnection and the allocation of interconnection costs." F.E.R.C. Order No. 2006, ¶ 516.

100. FERC's declaratory order is advisory only and is non-binding unless and until it is upheld by a federal district court. The Commission may decide to re-evaluate its LEO test in a future proceeding, based on FERC's guidance, however, only the federal court system can make such a determination as to the lawfulness of the LEO standard. *See Portland General Electric Company v. FERC*, 854 F.3d 692, 698 (D.C. Cir. 2017) ("FERC could avoid a great deal of confusion and waste of judicial resources by not using words like 'shall' and 'must,' and by making clear in its orders—as opposed to later in this court—that its discussions of PURPA related issues are advisory only.").

101. Montana law provides standards for determining rates and conditions for QFs, including: the PSC must encourage long-term contracts "in order to enhance the economic feasibility" of QFs, and set QF rates "using the avoided cost over the term of the contract"; the rates paid by a utility for the electricity purchased from a QF must be "established with consideration of the availability and the reliability of the electricity produced"; the Commission "shall set these rates using the avoided cost over the term of the contract"; and authorizing the Commission to adopt rules further defining the criteria for QFs, their cost-effectiveness, and other standards. Mont. Code Ann. § 69-3-604(2)–(5).

102. Mont. Admin. R. 38.5.1902(5) states that "[a]ll purchases and sales of electric power between a utility and a qualifying facility shall be accomplished according to the terms of a written contract between the parties or in accordance with the standard tariff provisions as approved by the commission."

103. Mont. Admin. R. 38.5.1903(2)(b) states that each utility shall purchase energy and capacity made available by a QF at a standard rate or if the QF "agrees, at a rate which is a negotiated term of the contract between the utility and the facility and not to exceed avoided costs to the utility."

104. Mont. Admin. R. 38.5.1905(2) states that utilities "shall purchase available power from any qualifying facility at either the standard rate determined by the commission . . . or at a rate which is a negotiated term of the contract between the utility and the qualifying facility." Rates for purchases shall not discriminate against QFs. 18 C.F.R. § 292.304(a)(1)(ii). A QF may elect to be paid a rate based on forward projections at the time the QF incurs an obligation to sell its output. 18 C.F.R. § 292.304(d)(2)(ii). Such a rate for purchase is the product of a forecast for a given length of time. Imposing symmetrical treatment on utility owned assets and other contracts for energy and capacity is therefore a necessary condition of the Commission's decision to abbreviate the contract length available to QFs.

105. FERC's rules state that nothing in the rules "[l]imits the authority of any electric utility or any qualifying facility to agree to a rate for any purchase, or terms or conditions relating to any purchase, which differ from the rate or terms or conditions which would otherwise be required" or "[a]ffects the validity of any contract entered into between a qualifying facility and an electric utility for any purchase." 18 C.F.R. § 292.301.

106. In a contested case under the Montana Administrative Procedure Act, the Commission is generally "bound by common law and statutory rules of evidence." Mont. Code Ann. § 2-4-612(2). Under the statutory rules of evidence, "a party has the burden of persuasion as to each fact the existence or nonexistence of which is essential to the claim for relief or defense the party is asserting." *Id.* at § 26-1-402; *Mont. Envtl. Info. Ctr. v. Mont. Dept. of Envtl. Quality*, 2005 MT 96, ¶ 14, 326 Mont. 502 ("the party asserting a claim for relief bears the burden of producing evidence in support of that claim.").

ORDER

IT IS HEREBY ORDERED THAT:

107. NorthWestern's Motion for Leave to File a Brief is DENIED.

108. The Commission finds that New Colony did not incur an LEO on May 24, 2017. The Commission reiterates its invitation to any interested party to initiate rulemaking to address concerns with its existing LEO test. *In re NorthWestern Energy's Application for Approval of Avoided Cost Tariff Schedule QF-1*, Docket D2016.5.39, Order on Reconsideration 7500d ¶ 75 (Nov. 24, 2017).

109. The PPA between New Colony and NorthWestern will be set for 15 years.

110. The Commission rejects NorthWestern's use of Long-2 adjustment and directs NorthWestern to refrain from using this adjustment in negotiations with QFs until the conditions described in ¶ 34 of this Order have been met.

111. The Commission maintains the Long-1 adjustment in calculating New Colony's avoided energy cost.

112. The market forecasts from ICE forward prices and EIA/AEO Henry Hub forecast escalation rates are used to calculate New Colony's avoided energy cost.

113. The Commission adopts an avoided cost-based capacity rate of $7.99/MWh, to be paid in NorthWestern's peak hours.

114. Carbon costs will not be included within the calculated avoided cost otherwise ordered.

115. The Commission implements deductions of $0.24/MWh for regulation, $0.89/MWh for spinning reserves, and $1.00/MWh for supplemental reserves. The Commission declines to implement any deductions for interconnection upgrade costs or transmission service upgrade costs.

116. The Commission adopts a $3 million security requirement to be reduced on an annual, pro rata basis over the contract term.

117. The Commission estimates an avoided cost rate of $21.49/MWh in off-peak hours, and $29.48/MWh in on-peak hours. NorthWestern must submit compliance work papers, based on the Commission's decisions in this Order, to verify these avoided cost estimates within 10 days.

DONE AND DATED this 12th day of December. 2017, by a vote of 5 to 0.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

BRAD JOHNSON, Chairman

TRAVIS KAVULLA, Vice Chairman

ROGER KOOPMAN, Commissioner

BOB LAKE, Commissioner

TONY O'DONNELL, Commissioner

ATTEST:

Rhonda J. Simmons
Commission Secretary

(SEAL)