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

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IN THE MATTER OF the Petition of	)	REGULATORY DIVISION
MTSUN, LLC To Set Terms and Conditions	)	
for Qualifying Small Power Production	)	DOCKET NO. D2016.12.103
Facility Pursuant to M.C.A. § 69-3-603	)	ORDER NO. 7535a

FINAL ORDER

APPEARANCES

FOR MTSUN:

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FOR THE INTERVENORS:

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NorthWestern Energy
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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
Jennifer Hill-Hart and Jeremiah Langston, Attorneys
Mike Dalton and Neil Templeton, Rate Analysts
Bob Decker, Policy Analyst

PROCEDURAL HISTORY

1.   On December 23, 2016, MTSUN filed a *Petition of MTSUN, LLC to Set Terms and Conditions for Qualifying Small Power Production Facility Pursuant to M.C.A. § 69-3-603*. On January 6, 2017, MTSUN filed *MTSUN LLC's Errata to Petition to Set Terms and Conditions for Qualifying Small Power Production Facility Pursuant to M.C.A. § 69-3-603* ("Petition"). The Petition was complete and compliant on January 6, 2017, and the statutory deadline for decision is July 5, 2017. Mont. Code Ann. § 69-3-603 (2015) ("The commission shall render a decision within 180 days of receipt of the petition"); Mont. Admin. R. 38.2.315 (2016) (allowing the Commission to reject deficient filings).

2.   MTSUN has proposed an 80 megawatt ("MW") nameplate capacity solar project ("Project") located near Billings, Montana, in Yellowstone County. Pet. at 1. MTSUN asserts the Project is a self-certified qualifying facility ("QF") under the Public Utility Regulatory Policies Act ("PURPA") creating a "legally enforceable obligation" ("LEO") which requires it to sell all its output to NorthWestern Energy ("NorthWestern"), and obligates NorthWestern to purchase all of the Project's output. *Id.* at 3–4. MTSUN asserts they have been unable to obtain an agreement with NorthWestern on (1) long-term forecast avoided cost pricing from NorthWestern, and (2) the terms and conditions of a power purchase agreement ("PPA"). *Id.* at 4. Further, MTSUN has submitted a request to commence the interconnection process, but argues that QFs only have to negotiate a PPA with NorthWestern, and are no longer required to tender an executed interconnection agreement with the utility in order to establish an LEO, per the Federal Energy Regulatory Commission ("FERC"). *Id*. at 2–3 (citing *FLS Energy, Inc.,* 157 F.E.R.C. 62,111 (2016)).

3.   The Commission issued a *Notice of Petition and Intervention Deadline* on January 12, 2017, and granted intervention to the Montana Consumer Counsel ("MCC"), NorthWestern, and the Montana Department of Natural Resources and Conservation ("DNRC") on January 25, 2017.

4.   On January 31, 2017, the Commission issued *Procedural Order 7535* in this matter establishing deadlines for discovery, testimony, and prehearing memoranda, as well as a hearing date of April 28, 2017.

5.   On February 14, 2017, and March 3, 2017, MTSUN filed responses to data requests issued on pre-filed direct testimony. On March 7, 2017, MTSUN filed a letter RE:

Change to Response to MCC-004(b).

6.   On March 17, 2017, the MCC, DNRC, and NorthWestern prefiled direct testimony and MTSUN filed Responses to data requests with updated exhibits.

7.   On April 17, 2017, the MCC, DNRC, and NorthWestern filed responses to data requests on their pre-filed direct testimony.

8.   On April 19, 2017, the Commission issued a *Notice of Commission Action* directing Commission staff to identify data requests to be moved into the record as evidence, giving the parties direction for the pre-hearing memoranda, and establishing a pre-hearing conference, establishing Jeremiah Langston as hearings examiner to make decisions on any pre-hearing motions or objections.

9.   On April 20, 2017, DNRC field an updated response to NorthWestern's data request NWE-025.

10.   On April 24, 2017, the parties filed pre-hearing memoranda and NorthWestern filed a *Motion to Strike and Objection to Admission of DNRC's Testimony*.

11.   On April 26, 2017, the parties met for a pre-hearing conference at the Commission offices, and DNRC filed a *Response to NorthWestern's Motion*.

12.   The Commission held a public hearing on April 28, 2017.

13.   On May 9, 2017, MTSUN and NorthWestern Energy filed post-hearing provides.

14.   On May 19, 2017, MTSUN filed its *Initial Post-Hearing Brief*.

15.   On June 1, 2017, the MCC and NorthWestern Energy each filed a *Post-Hearing Response Brief*.

16.   On June 8, 2017, MTSUN filed an *Unopposed Motion to Extend Time to File Post-Hearing Reply Brief* and request to extend the statutory deadline for final decision from July 7, 2017, to July 10, 2017.

17.   On June 9, 2017, the Commission issued a *Notice of Staff Action* granting MTSUN's request for an extension to file its Post-Hearing Reply Brief to June 12, 2017, and extending the statutory deadline for final decision in this matter to July 10, 2017.

18.   On June 12, 2017, MTSUN filed its *Post-Hearing Reply Brief*.

19.   On June 22, 2017, NorthWestern filed a *Motion to Strike the Power Purchase Agreement* attached to MTSUN's Post-Hearing Reply Brief. On June 27, 2017, MTSUN filed its *Brief in Response to NorthWestern's Motion to Strike*.

20.   On June 29, 2017, the Commission held a work session to discuss and act on MTSUN's Petition. On that same date, 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.

PROCEDURAL MATTERS

NorthWestern Energy's Motion to Strike

21.   Both MTSUN and NorthWestern have submitted versions of a PPA to the Commission in this docket. MTSUN attached a redlined, unsigned, draft PPA as Exhibit MTK-1 to its Petition. NorthWestern submitted a proposed PPA into evidence with its prefiled intervenor testimony as Exhibit_(BJL-2). Test. Bleau J. LaFave (Mar. 17, 2017). In its Post-Hearing Reply Brief, MTSUN attached "both a clean and redlined version of the Power Purchase Agreement submitted along with MTSUN's petition, with some minor edits" and that also "incorporates Commission-approved language from the *Greycliff* docket, D2015.8.64." MTSUN's Post-Hearing Reply Br. 33 (June 12, 2017).

22.   On June 22, 2017, NorthWestern Energy filed a motion to strike the PPA that MTSUN attached to its post-hearing reply brief. NWE Mot. to Strike (June 22, 2017). NorthWestern argues that MTSUN is attempting to introduce additional evidence into the record with this attachment and it argues that information not admitted into evidence during the hearing is not evidence before the Commission, and should be stricken from post-hearing briefs. *Id.* at 2.

23.   On June 27, 2017, MTSUN filed a brief in response to NorthWestern's motion, asserting NorthWestern's motion to strike "is groundless as it confounds the distinction between "evidence" on the one hand and contract on the other, which is essentially a matter of law." Br. in Resp. to NWE's Mot. to Strike 1 (June 28, 2017). MTSUN states it submitted a redlined version of the PPA with its Petition in order to highlight the areas of disagreement between MTSUN and NorthWestern. *Id.* MTSUN submitted the updated PPA, presumably in response to NorthWestern's claims it did not have access to a clean copy of the PPA and therefore it was unsure of MTSUN's preferred PPA terms. *Id.* at 4. MTSUN argues that there are no material differences in the PPA attached to its Petition and the PPA attached to its post-hearing reply brief. *Id.* at 3. MTSUN argues the updated PPA is not "new evidence" and MTSUN was not required to make its preferred form of PPA an evidentiary issue at the time of hearing. *Id.*

MTSUN argues there is no guidance from the Commission on how contract disputes are to be resolved or when the QF must submit the contract dispute, and "there is no evidence that suggests that NWE was not fully apprised in this proceeding of the form and content of the disagreements" between MTSUN and NorthWestern regarding the PPA. *Id.* at 23.

24.   MTSUN's argument is misplaced because the PPA is not a contract under the law. A contract is an agreement to do or not to do a certain thing, and Montana law defines the four elements of a contract that are essential to its existence, including the consent of the parties. Mont. Code Ann. §§ 28-2-101, -102. There has been no consent to a PPA in this docket and a contract does not exist. This is an evidentiary issue.

25.   At the hearing, MTSUN's witness, Mark Klein, offered a late-filed exhibit in response to a request from Commissioner Kavulla during cross-examination. Hr'g Tr. 66–68 (April 28, 2017). When the late-filed exhibit was being discussed, counsel for NorthWestern, Ann Hill, interrupted the line of questioning to express concerns about due process and evidence with late-filed exhibits, and requested the ability to review any late-filed exhibits before they are provided. *Id.* at 67:22–25, 68:1–2. Commissioner Kavulla recalled that this issue came up in a recent docket before the Commission, where the roles were reversed with NorthWestern making the late hearing provides and Mr. Uda objecting. *Id.* at 68:6–10. In response to this discussion, Mr. Klein indicated he would provide the late-filed exhibit. *Id.* at 68:13–14. The hearing continued with counsel for NorthWestern making a similar objection one more time in response to a request for a late-filed exhibit from MTSUN. *Id.* at 242:25, 243:1–3. By the end of the hearing, in addition to the two late-filed exhibits requested from MTSUN, four late-filed exhibits were requested from NorthWestern; counsel for the parties consulted and established a deadline for the late-filed exhibits to be filed with the Commission. *Id.* at 306:3–25, 307:1–7.

26.   The Commission is bound by common law and the statutory rules of evidence and applies the Montana Rules of Evidence in all contested cases. Mont. Code Ann. § 2-4-612(2); Mont. Admin. R. 38.2.4201. Per Montana administrative rules, at the hearing, the presiding officer (in this case, a Commissioner) may require the production of further evidence upon any issue, and upon agreement of the parties "he may authorize the filing of specific documentary evidence as part of the record within a fixed time after submission, reserving exhibit numbers therefor." Mont. Admin. R. 38.2.4206. MTSUN had ample opportunity to file an updated PPA since filing its Petition either prior to the hearing, during the hearing, or could have made a

request at the hearing to file the updated PPA as a post-hearing provide. At the hearing, MTSUN was put on notice of NorthWestern's objections to late-filed exhibits and the request to be able to review late-filed exhibits prior to filing. If the Commission required further information from the parties on the disputed terms and conditions of the PPA, the Commission would have requested briefing on disputed contract terms and provisions as it has done in the past. And, if as MTSUN argues, there are no material differences in the PPA filed with its Petition and the updated PPA filed with MTSUN's Post-Hearing Reply Brief, there is no need to introduce the updated PPA to the record in this docket.

27.   On June 29, 2017, the Commission held a work session to consider NorthWestern's Motion to Strike the clean and redlined versions of the PPA attached to MTSUN's Post-Hearing Reply Brief as Exhibit 1. NorthWestern's Motion to Strike was GRANTED on June 29, 2017.

DISCUSSION AND FINDINGS OF FACT

28.   The two primary and interrelated contested issues in this case are whether MTSUN created a LEO in December 2016, and whether MTSUN's total avoided cost rate of $63.70/MWh is just and reasonable and in the public interest. NorthWestern identified further contested issues in the treatment of environmental attributes, financial responsibility for interconnection costs and transmission service network upgrades, the right to curtail, and security requirements. NorthWestern Energy's Prehearing Mem. 2 (Apr. 24, 2017). In addition, the MCC identified the issue of what is a reasonable contract length for the MTSUN project, and whether or not NorthWestern's ratepayers should be responsible for integration costs attributable to the MTSUN project and to what extent. MCC Prehearing Mem. 1 (Apr. 24, 2017).

Legally Enforceable Obligation

29.   MTSUN asserts it created an LEO on December 21 or 23, 2016. Hr'g Tr. 53:2–3, 286:5–11. MTSUN attached a proposed PPA, "executed by MTSUN" and "consistent with NWE's current avoided costs and contains sufficient guarantees of trustworthiness." Pet. at 2. In its petition, MTSUN indicated it had not signed an interconnection agreement, but had submitted a request to commence the interconnection process to NorthWestern. *Id.* MTSUN further argued that the prong of the *Whitehall Wind* test that requires a fully executed interconnection agreement

is no longer valid after FERC's *FLS Energy* declaratory order. *Id.* at 2–3.

30.   MTSUN stated it used as much relevant data as it could get from NorthWestern's 2015 Electricity Supply Resource Procurement Plan ("2015 Plan") to derive their $63.70/MWh avoided cost. Hr'g Tr. at 70:15–20; Test. Mark T. Klein 3 (Jan. 6, 2017); DR PSC-014; *see* NorthWestern Energy 2015 Electricity Supply Resource Procurement Plan, Docket N2015.11.91 (Nov. 25, 2015). In addition, MTSUN states that as of November 30, 2016, MTSUN's and NorthWestern's estimates of avoided energy costs were virtually identical. *Id.* at 71:7–14; MTSUN Initial Post-Hr'g Brief 24 (May 19, 2017). Therefore, MTSUN argues there is no concern that its $63.70/MWh LEO price reflects an outdated or stale forecast. *Id.* MTSUN states that the parties are divided over the avoided cost of capacity. Hr'g Tr. at 71–73; MTSUN Initial Post-Hr'g Brief at 24–25. MTSUN argued that NorthWestern's methodology is unreasonable and not utilized by any other utility, and the Commission has offered scant guidance on calculating avoided capacity costs for solar projects. *Id.*

31.   NorthWestern contends that MTSUN did not create an LEO. Test. John Bushnell 4 (Mar. 17, 2017). According to NorthWestern, even ignoring the Commission's requirement that a QF must execute an interconnection agreement to establish an LEO, MTSUN did not establish an LEO because its $63.70/MWh price is not consistent with NorthWestern's avoided cost, with specific beginning and ending dates. NorthWestern Energy Post-Hr'g. Resp. Br. 3 (June 1, 2017). NorthWestern argues that MTSUN's price is based on an inflated capacity contribution. *Id.* Further, NorthWestern argues that MTSUN's use of the 2015 Plan was inconsistent, and "diverged from the plan and assumed an online date of 2019 for the proxy resource," rather than the 2015 Plan's date of 2025. *Id.* at 7; Hr'g Tr. 78:12–20.

32.   The MCC similarly asserts that MTSUN's price exceeds NorthWestern's avoided cost. MCC Post-Hr'g. Resp. Br. 1 (June 1, 2017). Because of this, and because MTSUN has not signed an interconnection agreement, the MCC states MTSUN has not made the kind of commitment necessary to create an LEO. *Id.* The MCC contends that MTSUN's methodology for calculating its capacity contribution is arbitrary and should be rejected. *Id.* at 7; Test. Jaime T. Stamatson 5–11 (June 1, 2017). Like NorthWestern, the MCC also notes that although NorthWestern assumed an online date of 2025 for its 308 MW Combined Cycle Combustion Turbine ("CCCT"), MTSUN assumed an online date of 2019 for the purposes of its calculations. Test. Stamatson at 4–5. According to the MCC, altering the online date for a resource acquisition

chosen "untethers MTSUN's avoided cost methodology from the 2015 Plan" and although MTSUN used other assumptions from the 2015 Plan, those are now "stale" for the purpose of ratemaking. *Id*. (citing DR PSC-014(a)).

33.   FERC regulations grant states discretion in setting specific parameters for LEOs. *W. Penn Power Co.*, 71 F.E.R.C. 61,153, 61,495 (May 8, 1995). "If FERC had determined it necessary to set more specific guidelines concerning LEOs, it could have done so . . . defining the parameters for creating a LEO is left to the states and their regulatory agencies." *Power Res. Grp., Inc. v. PUC,* 422 F.3d 231, 239, 165 F. App'x 378 (5th Cir. 2005).

34.   FERC rules implementing PURPA require that if a QF chooses to sell its energy to a utility pursuant to an LEO for a specified term at forecast avoided cost rates, the avoided costs must be calculated at the time the obligation is incurred. 18 C.F.R. § 292.304(d) (2017).

35.   In *Whitehall Wind*, the Commission reiterated FERC's rule that states determine the date at which an LEO is incurred. *In re Whitehall Wind, LLC*, Docket D2002.8.100, Order 6444e, ¶ 35 (May 18, 2010) (quoting *Metropolitan Edison Co.*, 72 FERC ¶ 61,015, P 61,050 (July 6, 1995)); *In re Crazy Mountain Wind, LLC*, Docket D2016.5.56, Order 7505c, ¶ 15 (Apr. 18, 2017). In *Whitehall Wind*, the Commission determined that, to establish an LEO, a QF must tender a PPA to the utility with a price term consistent with the utility's avoided cost, specified beginning and ending dates, sufficient guarantees to ensure performance, and an executed interconnection agreement. Order 6444e ¶ 47. In a recent Notice of Intent Not to Act and Declaratory Order, FERC stated that the requirement for an executed interconnection agreement is inconsistent with PURPA and FERC's rules implementing PURPA. *FLS Energy, Inc.,* 157 FERC ¶ 61,211, at P 20 (Dec. 15, 2016). However, the Commission determined that this FERC decision does not remove the remaining components of the *Whitehall Wind* LEO test. Order 7505c ¶ 15.

36.   A QF is not required to predict the precise avoided cost the Commission may ultimately determine in order to meet the requirement of tendering a PPA to the utility with a price term consistent with the utility's avoided cost. Order 7505c ¶ 16. FERC regulations require the Commission to consider, among other things, the individual and aggregate value of energy and capacity from qualifying facilities on an electric utility's system in determining avoided costs. 18 C.F.R. § 292.304 (e)(2)(vi).

37.   As a first step in evaluating the existence of an LEO, the Commission will assume that MTSUN's proxy model is a reasonable avoided cost estimation method. If the LEO price does not approximate the avoided cost using the QF's own method, there is no need to delve into the reasonableness of the model itself to resolve the LEO issue. This logic rests on the notion that a QF will not estimate avoided costs using a method that understates those costs.

38.   In order to evaluate MTSUN's assertion that it created an LEO in December 2016, it is necessary to analyze whether MTSUN's asserted LEO price of $63.70/MWh is consistent with NorthWestern's avoided costs at that time. The Montana Supreme Court determined that "under 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. As the Commission articulated in *Crazy Mountain*, it is not reasonable to attempt to establish an LEO date that is not consistent with a utility's avoided cost calculation "at the time the obligation is incurred." Order 7505c ¶ 17; 18 C.F.R. § 292.304(d)(2)(ii). As discussed later in this order, the Commission agrees with the MCC that the natural gas price forecast from the 2015 Plan that MTSUN used for its avoided cost calculation is stale for the purposes of determining NorthWestern's avoided costs in December 2016. *Infra* ¶ 45. The Commission will estimate NorthWestern's avoided costs for December 2016, using the MTSUN proxy model with a December 2016 natural gas price forecast.

39.   To estimate NorthWestern's avoided costs in December 2016, the Commission relied on the December 2016 natural gas price projections included in NorthWestern's response to data request PSC- 049. DR PSC-049 (Apr. 17, 2017). Substituting the December 2016 natural gas price projections for the 2015 Plan natural gas price projections MTSUN uses reduces the avoided cost price from $63.70/MWh to $57.74/MWh.

40.   In addition, as the parties recognize, the capacity contribution of MTSUN's solar project is a critical factor in estimating avoided costs. At the time MTSUN filed its Petition, the Commission had not established a method for determining the capacity contribution of solar QFs. As discussed later in this order, the Commission agrees with the MCC that MTSUN's method of estimating the capacity contribution of its project is unreasonable. *Infra* ¶ 68. The Commission's finds that a capacity contribution of 6.1%, derived from the methodology of the Southwest Power Pool ("SPP") for calculating net future capacity contribution of wind and solar

generation projects and consistent with its recommendation in Docket D2016.5.39, is reasonable for MTSUN. *See* Docket D2016.5.39, Order 7500c (June 22, 2017). Using a 6.1% capacity contribution in MTSUN's model further reduces the avoided cost from $57.74/MWh to $37.55/MWh.

41.   MTSUN also did not possess a signed interconnection agreement before asserting it had an LEO. As discussed above, FERC has declared that this part of Montana's LEO test is not consistent with federal regulations. *Supra* ¶ 35. The Commission declines to determine whether this ruling has any binding effect on the Commission. Indeed, it is not necessary to make any ruling on the interconnection agreement issue in order to determine whether there was or was not an LEO in December 2016, because MTSUN's price term was inconsistent with the project's avoided cost, thereby failing to pass the *Whitehall Wind* test. As reiterated in Order 7505c, the Commission addresses the merits of the interconnection-agreement element of the *Whitehall* LEO test in Order 7500c issued in D2016.5.39, the facts of which gave rise to FERC's declaratory ruling. *See* Order 7500c (June 22, 2017).

42.   The Commission agrees with the MCC and NorthWestern that MTSUN failed to satisfy the LEO test. The Commission finds that MTSUN's LEO price is not consistent with NorthWestern's avoided costs in December 2016, the time when MTSUN asserts it incurred its obligation. MTSUN's $63.70/MWh LEO price is 70% higher than the Commission's avoided cost estimate of $37.55/MWh based on MTSUN's model with December 2016 natural gas prices and a reasonable estimate of the project's capacity contribution. As a result, the Commission concludes that MTSUN has not satisfied the Commission's requirements for establishing an LEO.

Avoided Cost Estimates

Methods and Avoided Energy Costs

43.   MTSUN estimates NorthWestern's avoided costs using a "proxy" method reflecting acquisition of a 308 MW combined cycle combustion turbine ("CCCT") in 2019. Test. Klein at 9. MTSUN relies on NorthWestern's 2015 Plan which identified a CCCT in 2025 as an element of least-cost resource strategy, for resource cost information, including carbon costs. Test. Klein at 9. MTSUN's proxy model classifies the fuel- and carbon-related variable costs of the CCCT as avoided energy costs. DR PSC-014. Using this approach, MTSUN estimates

avoided energy costs of $40.18/MWh levelized over 25 years (December 2018 – November 2043). Test. Klein at 14.

44.   In December 2016, just before MTSUN filed its Petition, the Commission issued Order 7505b regarding a petition by Crazy Mountain Wind, LLC to set terms and conditions for a QF contract. *In re Crazy Mountain Wind, LLC*, Docket D2016.7.56, Order 7505b (December 22, 2016), In that decision, the Commission adjusted the timing of the carbon adder in NorthWestern's 2015 Plan to 2025 from 2022. Order 7505b ¶¶ 61-65; Hr'g Tr. 52:25, 53:7. In response to discovery in this case, MTSUN re-estimated its avoided energy costs based on the carbon cost adjustment in Order 7505b, which resulted in a revised energy cost estimate of $36.62/MWh. DR PSC-007.

45.   The MCC opposes MTSUN's avoided energy cost, asserting that advancing the acquisition of the CCCT from 2025 to 2019, as MTSUN does, untethers MTSUN's avoided cost method from the 2015 Plan. In addition, the MCC states that the CCCT fuel- and carbon-related variable costs in NorthWestern's 2015 Plan are now stale and should not be used to set avoided cost rates for MTSUN. Test. Stamatson at 5.

46.   NorthWestern estimates avoided costs using a "peaker" method, wherein a QF is paid for capacity it delivers based on the annualized cost of a utility's least-cost capacity option and is paid for energy based on marginal energy costs. Edison Electric Institute, *PURPA: Making the Sequel Better than the Original* 10 (Dec. 2006). NorthWestern's proposed marginal energy costs reflect the results of PowerSimm modeling of the impact on NorthWestern's net position of adding MTSUN energy to its least-cost, or economically optimal, portfolio. Test. Bushnell 6-8; Test. Luke P. Hansen 5-7 (Mar. 17, 2017).

47.   As in other recent avoided cost cases, NorthWestern posits three basic net positions, short, long-1, and long-2:

      a. A short position occurs when, even with MTSUN output, NorthWestern requires additional energy to meet load; in this case, MTSUN output avoids the market price of energy.

      b. A long-1 position occurs when NorthWestern's supply is greater than load and at least one of its dispatchable generation resources costs less than the current market price; in this case, MTSUN output avoids the running cost of the marginal dispatchable resource.

      c. A long-2 position occurs when all dispatchable resources cost more to operate than the current market price; in this case, NorthWestern considers the avoided energy cost to be zero.[1]

See Test. Bushnell. 7–8.

    48.   NorthWestern projects wholesale electricity market prices using forward prices escalated by the Energy Information Administration's ("EIA") 2017 Annual Energy Outlook ("AEO") forecast of natural gas price changes. Test. Hansen at 8. NorthWestern uses Intercontinental Exchange ("ICE") forward market quotes at the Mid-Columbia ("Mid-C") trading point, obtained on March 2, 2017, for the period from March 2017 through December 2020. *Id*. at 8-9 (*see* Excel Files Supporting Ex. NWE-5, "icecleared_power_2017_3.2lh"). NorthWestern adjusts the Mid-C forward prices to account for transmission to Montana. Test. Hansen at 9.

    49.   The Commission declines to adopt MTSUN's proxy method for two main reasons. First, the Commission agrees with the MCC that advancing the acquisition of the planned CCCT from 2025 to 2019 untethers the avoided cost calculation from NorthWestern's 2015 Plan and is not reasonable. The Commission agrees with NorthWestern that advancing the assumed acquisition date of the CCCT increases estimates of avoided cost relative to the expected avoidable costs in the 2015 Plan. Test. Bushnell at 26. Second, while the proxy method is simple and transparent, it is insensitive to changes in NorthWestern's portfolio. When setting avoided cost rates for large individual QFs, such as MTSUN, the Commission finds that it is preferable to use a method that accounts for the impact of large resource acquisitions on the calculation of avoided costs. The Commission used NorthWestern's peaker method to establish rates in the *Greycliff* and *Crazy Mountain* cases. In *Crazy Mountain*, the Commission approved a version of the peaker method that NorthWestern had used to evaluate a generation expansion at its Ryan Dam. Order 7505b ¶¶ 76-84. The Commission finds that method is reasonable in this proceeding as well.

    50.   During the public hearing, a question arose regarding whether the base case portfolio used to measure changes in NorthWestern's net position should include the resources identified in the economically optimal portfolio ("EOP") from NorthWestern's 2015 Plan, which

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[1] In this docket, NorthWestern valued MTSUN energy at the current market price in order to reflect a recent Commission decision on this issue. Test. Hansen at 14-16; Test Bushnell at 7-8; Docket D2016.7.56, Order 7505b, ¶¶ 73-75 (Dec. 22, 2016).

have not yet been acquired. Hr'g Tr. at 193:2–195:14. NorthWestern asserts the EOP resources should be included because contracting with MTSUN will not allow NorthWestern to defer or displace those resources, given that MTSUN does provide the amount or type of capacity the EOP resources would provide. *Id*. at 194:3-15.

51.   The Commission rejects NorthWestern's position. The Commission has not pre-approved the EOP and the Commission's comments on the 2015 Plan indicate that the EOP may not be a least-cost portfolio of resources. Comments on NorthWestern's 2015 Resource Procurement Plan, Docket N2015.11.91, ¶ 18 (Feb. 2, 2017). For the purposes of projecting an avoided cost of energy, the Commission will continue to use the method it approved in *Crazy Mountain*. Order 7505b ¶ 77, Order 7505c ¶ 29.

52.   For several dockets, the Commission has established carbon costs to be included in projected future energy prices and avoided costs calculations. *See In re NorthWestern Energy's Acquisition of Hydroelectric Generation Facilities*, Docket D2013.12.85, Order 7323k, ¶¶ 81–90 (Sept. 25, 2014); *In re Greycliff Wind Prime, LLC*, Docket D2015.8.64, Order 7436d, ¶ 28 (Sept. 16, 2016); *In re Crazy Mountain Wind, LLC*, Docket D2016.5.56, Order 7505c, ¶¶ 36–41 (Apr. 18, 2017). In *Crazy Mountain,* the most recent proceeding concerning a petition from a QF to set terms and conditions of a QF PPA, the Commission made an adjustment to the carbon costs included in the avoided cost to reflect a new presidential administration and the anticipation that "federal legislation or regulation regarding carbon dioxide emission control" would be delayed. Order 7505c ¶ 40.

53.   MTSUN advocates for using a carbon cost similar to what was used in the Commission's *Crazy Mountain* decision in this proceeding. MTSUN Reply Br. at 24. In light of the Commission's decision regarding carbon costs in the hydroelectric generation facilities preapproval decision, MTSUN argues that the Commission would violate PURPA's prohibition on discriminatory avoided cost rates if it declined to take this approach. MTSUN Reply Br. at 25 (citing 18 C.F.R. § 292.304(a)(1)(iii)). MTSUN notes that at the time of the preapproval decision, the Clean Power Plan had not "even been introduced . . . and the Commission approved a large avoided carbon payment in NWE's acquisition of PPL Montana's hydroelectric resources in Docket D2013.12.85." *Id.* at 24–25.

54.   NorthWestern proposes two approaches to carbon costs based on the EIA 2017 AEO. Test. Bushnell at 34:11–13. This outlook uses both Clean Power Plan ("CPP") and No-

Clean Power ("No-CPP") Plan compliance scenarios. *Id.* at 34:14–15. "[T]he no-CPP escalation represents the 'no-carbon' case, while the natural gas price escalation with CPP represents the 'with-carbon' case." *Id.* at 34:17–19. Both of these figures are distinct from the carbon cost used in Docket D2016.7.56. *See* Test. Hansen at 19:12–16. NorthWestern uses the CPP case escalators to estimate avoided costs for a "carbon and environmental benefits scenario," which adds about $0.63/MWh to its without-carbon avoided energy cost estimates. *Id.* However, NorthWestern acknowledges that the Commission could apply the same $9.65/MWh carbon adder it adopted in Order 7505b. Test. Hansen at 19; Order 7505b ¶ 65.

55. The MCC argues that PURPA does not require the Commission to include environmental benefits in avoided cost rates. Test. Stamatson at 5. The MCC states the avoided cost should not include carbon costs: "[l]ocking an excessive CO2 value into REC values—and retail rates—for decades into the future would harm consumers and violate the principle of consumer indifference." MCC Post Hearing Br. at 7. However, the MCC advocates excluding such costs altogether, given the current absence of any carbon price in Montana and the low likelihood of such a price in the near future, and argues that ratepayers should not pay for something that is not actually imposed on the utility. Hr'g Tr. 139:14-22. According to the MCC, at a minimum,[2] the assumed onset of any carbon costs should be 2025, consistent with Order 7505b. Test. Stamatson at 12. The MCC also argues that allowing the QF to retain renewable energy credits (RECs) and all environmental attributes "fully account[s] for potential CO_2 costs." MCC Post Hr'g Br. at 7. The MCC notes that FERC has stated avoided cost rates "are not intended to compensate the QF for more than energy and capacity," and PURPA does not require the transfer of RECs. *Id.* at 8–9 (citing *Covanta Energy Group*, 105 F.E.R.C. ¶ 61,004, at P 61,007 (2003); *Cal. Pub. Utilities Comm'n*, 133 F.E.R.C. ¶ 61,059, at P 61,267 (2010)).

56. The MCC states "Northwestern and MTSUN could still negotiate a separate price for carbon dioxide outside of a Purchase Power Agreement." Test. Stamatson at 12:9–10. While acknowledging that there is no current value for RECs in Montana, the MCC points out that in the future, "if there is an explicit carbon price in Montana then the value of RECs will capture that." *Id.* at 13:14–17. Further, the MCC argues if these carbon costs materialize before or after the time of the conclusion of MTSUN's PPA, MTSUN will be able "to capture that value in its

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[2] The Commission interprets this phrase, "at a minimum," to mean the earliest year in the future when a carbon cost should be included as part of total avoided cost.

avoided cost rate" as calculated at that time. *Id.* at 13:17–19.

57.   The Commission finds the MCC's and NorthWestern's no-carbon positions more persuasive than MTSUN's position of implementing a carbon cost similar to that adopted in the *Crazy Mountain* decision. However, the Commission still finds its rationale for carbon cost adjustments in its *Crazy Mountain* decision persuasive. *See* Order 7505c ¶ 40. The Commission agrees with the MCC's position that the shortening of the 25-year contract length and the retention of RECs by a QF comprise a better method for recovering carbon costs than direct inclusion in the utility's avoided cost based on 25-year old assumptions. *See* Test. Stamatson at 12–13; MCC Post Hearing Br. at 8–9.

58.   In response to MTSUN's argument that even though the Clean Power Plan had not been introduced, carbon costs were recovered in Docket D2013.12.85, MTSUN Reply Br. at 24–25, the Commission notes that the Clean Power Plan was proposed by the Environmental Protection Agency on June 18, 2014, engaging the notice and comment process. *See* Carbon Pollution Standards for Modified and Reconstructed Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34959 (Jun. 18, 2014). The evidentiary hearing on the hydroelectric facilities was held from July 8 through July 18, 2014, and Final Order 7323k was issued September 26, 2014. Final Order 7323k ¶ 19. The Commission finds that while the proposed carbon emission rule of June 18, 2014, represented a justifiable reason to incorporate a carbon adder in avoided costs, the Trump Administration's oppositional view to emission regulation and the Clean Power Plan do not. *See* Review of the Clean Power Plan, 82 Fed. Reg. 16329 (Apr. 4, 2017) ("The U.S. Environmental Protection Agency (EPA) announces that it is reviewing and, if appropriate will initiate proceedings to suspend, revise or rescind the Clean Power Plan"); *see also* NWE's Resp. Br. at 7 ("The fuel and carbon dioxide costs from the 2015 Plan are now stale").

59.   The Commission also notes that it possesses the authority and technical fact finding expertise to appropriately balance the future risk of carbon costs to be borne by rate payers. *See* Order 7505c ¶ 41 (citing *Citizens Action Coal. of Ind., Inc. v. Duke Energy Ind., Inc.*, 9 N.E.3d 260, 2014 Ind. App. Unpub. LEXIS 388,*25 (Ind. Ct. App. 2014)); *In re Quantification of Envtl. Costs Pursuant to Laws of Minn. 1993*, 578 N.W.2d 794, 799 (Minn. Ct. App. 1998); *Southwestern Electric Power Co. v. PUC of Tex.*, 419 S.W.3d 414, 418, 426–28 (Tex. App. 2011)). The Commission's decision to exclude carbon costs from the avoided cost estimates is

consistent with its decision in Docket D2016.5.39 regarding standard rates for QFs. *See* Order 7500c. Given the length of the PPA, the availability of RECs to serve as a proxy for future carbon costs, and the current nebulous state of federal legislation or regulation regarding carbon dioxide emission control, the Commission declines to include any carbon costs within the calculated avoided cost.

60. The Commission finds that MTSUN retains ownership of all renewable attributes associated with its facility and may separately transact with NorthWestern or other entities for the purchase of those attributes.

61. Based on the above findings, and consistent with the Commission's decision authorizing a 10-year contract length, discussed below, the Commission finds that NorthWestern's 10-year levelized avoided energy costs, based on NorthWestern's PowerSimm model without a carbon adder and without EOP resources, is $18.67/MWh.

Avoided Capacity Cost

62. Of MTSUN's proposed total avoided cost rate of $63.70/MWh, the amount that represents the avoided cost of capacity is $25.36/MWh (both figures are levelized over 25 years). Test. Klein at 3.

63. MTSUN's proxy method for calculating avoided costs classifies as capacity-related the capital, fixed operation and maintenance (O&M), and variable O&M costs of the CCCT proxy resource. Test. Klein at 14; 2015 Plan at 9-3. MTSUN then applies its avoided capacity cost to the capacity contribution that it asserts its solar project provides to NorthWestern's system, which it calculates by assuming that the project will contribute 9.6% of its nameplate capacity in the months of November through April and 38.3% in May through October. Test. Klein at 13–14. MTSUN attributes its use of 9.6% for November through April to NorthWestern's capacity contribution estimate for solar resources in D2016.5.39, the NorthWestern QF-1 tariff docket, while its value of 38.3% for May through October is based on the average of fixed solar facility capacity contributions of four utilities—PacifiCorp, Idaho Power, Public Service of Colorado, and Avista. Test. Klein at 12-14; DR PSC-012(a); *See* Pet. Ex. MTK-13. MTSUN calculated an average of all months and adjusted it upward by 25% to reflect the additional production benefits of a single-axis tracking system, which is planned for

the MTSUN project. Test. Klein, at 14; *See* Pet., Ex. MTK-13. Using this approach, MTSUN determines a capacity contribution of 29.9% of its nameplate capacity. Test. Klein at 14.

64.   NorthWestern's peaker method calculates the avoided capacity cost by first identifying the least-cost capacity resource in the 2015 Plan, an aeroderivative combustion turbine ("AERO") unit, and calculating its 25-year levelized cost to be $119.06/kW-year. This cost is applied to MTSUN's capacity contribution. NorthWestern proposes a "measure-and-pay" methodology to calculate the capacity contribution of the MTSUN project. This method applies an 85/10 exceedance analysis to NorthWestern's heavy-load hours in the peak months of January, February, July, August, and December. NorthWestern asserts that focusing the analysis on on-peak hours is appropriate because the loads in those hours drive NorthWestern's need to acquire capacity resources. Test. Bushnell 16–19; *see also* NorthWestern's testimony in D2016.5.39 for further explanation of "measure-and-pay" methodology.

65.   NorthWestern arrives at an overall capacity payment by building up to a rolling 5-year average capacity contribution, with each year measured by the 85/10 exceedance method. NorthWestern would make annual payments to MTSUN (after building to a 5-year average) by multiplying the 5-year average capacity contribution to the levelized AERO cost of $119.06/kW-year. *Id.* at 18.

66.   NorthWestern opposes MTSUN's capacity contribution calculation method, asserting that it is based on several mistaken assumptions. NorthWestern contends that its capacity contribution estimate of 9.6%, which is incorporated by MTSUN into its capacity calculation, already reflects single-axis tracking solar PV output and should not have been adjusted upward by 25%. Additionally, NorthWestern states that its 9.6% capacity contribution estimate is an annual figure and should not have been applied selectively to the November-through-April months; NorthWestern states its analysis produced 0% capacity contribution for those months. *Id.* at 19-20.

67.   NorthWestern further argues that MTSUN errs in basing its May-through-October capacity calculation on the capacity contribution values for solar from four other utilities because those values are based on summer peak analysis, whereas NorthWestern's peak loads occur in winter. *Id.* at 20; *See* Pet., Ex. MTK-13.

68.   The MCC also opposes MTSUN's proposed capacity contribution value and makes arguments similar to those of NorthWestern. The MCC states that MTSUN erroneously

applies NorthWestern's annual value of 9.6% to select months for which NorthWestern's value does not apply. Additionally, the MCC opposes MTSUN's use of solar capacity values from other utilities for the May-through-October months because those utilities are summer-peaking, whereas NorthWestern's system is winter-peaking. The MCC also contests MTSUN's assertion that the MTSUN winter production can beneficially alter the production of NorthWestern's hydro facilities on the Madison-Missouri River system, as those facilities have limited storage capacity. Test. Stamatson at 8–11.

69.   The Commission declines to adopt MTSUN's method for calculating avoided capacity cost. First, the Commission finds that MTSUN inappropriately classifies all of the CCCT capital costs as capacity costs. Historically, when using a CCCT as a proxy resource, the Commission has only classified as capacity-related the portion of the CCCT capital and fixed O&M costs that are equal to the capital and fixed O&M costs of a pure capacity resource, such as an AERO unit. Docket D2010.7.77, Order 7108e (Oct. 19, 2011); Docket D2012.1.3, Order 7199d (Dec. 7, 2012). Second, the Commission agrees with NorthWestern and the MCC that advancing the acquisition of the CCCT from 2025 to 2019 untethers the avoided cost calculation from NorthWestern's 2015 Plan. *Supra* ¶¶ 31–32, 45; 2015 Plan at 1-5, 12-8. Third, the Commission finds persuasive the assertions by NorthWestern and the MCC that MTSUN errs in applying NorthWestern's capacity contribution of 9.6% to select months of the year and in using capacity values of other utilities to estimate MTSUN's capacity contribution on NorthWestern's system for the remaining months of the year. MTSUN does not provide sufficient justification for the use of the other utilities' solar capacity values, particularly regarding the methods used by those utilities and whether the load characteristics and capacity needs of the utilities are similar to NorthWestern's.

70.   NorthWestern has proposed the 85/10 method in other dockets before the Commission. DR PSC-031(c); *See In re Application for Approval of Avoided Cost Tariff for New Qualifying Facilities*, Docket No. D2012.1.3; Docket D2016.5.39. NorthWestern is not aware of any other utilities that use the 85/10 exceedance method. Hr'g Tr. 195:20–25.

71.   NorthWestern's service area in South Dakota operates within the footprint of the Southwest Power Pool ("SPP"). Test. Michael S. Babineaux 6 (Mar. 17, 2017). The SPP exceedance method for measuring capacity value received attention from NorthWestern in this case. Hr'g Tr. 195–200; DR PSC-031. In Docket D2016.5.39, the Commission found the SPP

method superior to NorthWestern's 85/10 method because the SPP method measures exceedance over a single multi-year set of high-load hours and corresponding resource output and better captures a resource's contribution to serving the highest peak loads. *See* Order 7500c.

72.   The Commission finds certain merit in NorthWestern's method for calculating MTSUN's capacity contribution; NorthWestern's use of an AERO unit built in 2019 as the avoidable capacity resource is reasonable. Although the AERO unit is not an EOP resource in NorthWestern's 2015 Plan, its fixed costs are a proxy for the capacity value of the 2015 Plan's selected ICE unit. However, the Commission declines to adopt NorthWestern's proposed 85/10 exceedance method for calculating MTSUN's capacity contribution. The Commission is not persuaded that NorthWestern's application of the 85/10 exceedance methodology is sufficiently supported by precedent or evidence in this docket, and that it possesses a weaker statistical foundation than the exceedance method used by the SPP. *Infra* ¶¶ 74–75. Therefore, the Commission declines to adopt NorthWestern's application of the 85/10 exceedance methodology.

73.   The Commission declines to adopt NorthWestern's measure-and-pay approach at this time, which gradually incorporates actual production data to create a payment system based on a 5-year rolling average of estimated capacity value. A measure-and-pay system would require ongoing data-gathering and exceedance calculations which could be subject to disputes. Additionally, this is not how utility-owned resources are currently compensated for their capacity.

74.   In this case, NorthWestern estimates a capacity contribution of 0% for MTSUN using the SPP method. Test. Babineaux at 7. However, in Docket D2016.5.39, the Commission adopted a 6.1% capacity contribution for QF-1 solar projects. *See* Order 7500c. The Commission attributes the difference between the SPP-based capacity calculation of 6.1% in the QF-1 docket and NorthWestern's SPP-based capacity calculation for MTSUN to the fact that solar generation input data in the QF-1 docket was derived from National Renewable Energy Laboratory ("NREL") solar generation data from six sites across Montana, while input data for NorthWestern's calculation in this docket is based solely on NREL data for the single MTSUN

location.[3] *See* Docket D2016.5.39, Test. Bushnell, Ex. JBB-2 at 10 (May 3, 2016). The issue of solar QF capacity contribution is an issue of first impression before the Commission. Given the varied locations of QF facilities already on NorthWestern's system, together with the probability of additional solar and wind QFs in the future, the Commission determines that input data for the SPP method of calculating MTSUN's capacity contribution value should reflect the multi-site, individual and aggregate value of energy and capacity from QFs in Montana, and therefore relies on the locational diversity of solar QF resources.

75.   In finding for multi-site QF input data in utilization of the SPP method, the Commission relies on FERC requirements in a state regulatory body's determination of avoided costs for QFs. One of those factors to be considered is the "individual and aggregate value of energy and capacity from qualifying facilities on the electric utility's system." 18 CFR 292.304(e)(2)(vi). The Commission finds that the use of multi-site QF input data for the SPP method not only makes sense in the context of NorthWestern's portfolio, but considers both the individual and aggregate value of energy and capacity from solar QFs, in compliance with the FERC requirement.

76.   The Commission determines an MTSUN 10-year levelized annual capacity payment as the product of a 6.1% capacity contribution and a $118.32/kW-yr capacity cost. The product is $577,402 per year, or $10.53 per hour, when spread over levelized peak-load production. The Commission finds that a rate of $10.53/MWh in peak-load hours is just and reasonable.

Avoided Transmission Costs

77.   NorthWestern's Local Transmission Plan for January 1, 2014 to December 31, 2015 ("Transmission Plan"), identified a potential for low-voltage risk in the Billings area if two 230 kV lines which deliver power from Broadview into Billings were to experience outages. MTSUN asserts this low-voltage risk has become more pronounced with the closure of the Corette power plant near Billings. MTSUN asserts its project will provide benefits to NorthWestern's transmission system because it would serve Billings-area load and, therefore,

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[3] Nameplate capacity of renewable resources is not a control variable in the SPP method. The capacity contribution value produced by the SPP method varies as a function of hourly solar radiation data and corresponding system load data.

reduce the low-voltage risk to the Billings area identified in the Transmission Plan and minimize the need for an additional 230 kV line to deliver power into Billings. Test. Klein at 12.

78.   NorthWestern asserts it has already studied the potential for local generation in the Billings area to mitigate the low-voltage risk and determined that building an additional 230 kV transmission line into the area is the more cost-effective solution. Test. Chelsea Loomis 5 (Mar. 17, 2017). NorthWestern contends intermittent resources cannot provide solutions to potential transmission deficiencies because transmission outages can occur at any time of the year, and intermittent resources do not provide reliable generation in all hours. *Id.* at 6.

79.   MTSUN provides little evidence that its project would avoid the transmission reliability projects planned for the Billings area. It admits it did not request from NorthWestern the avoidable costs from delaying future transmission upgrades designed to mitigate the risk of transmission outages in the Billings area. DR PSC-015. The record does not show what portion, if any, of those transmission costs would be avoided by MTSUN's energy and capacity.

80.   Because transmission reliability standards must be achieved in all time periods, and because MTSUN's output is not available in all time periods, the Commission finds that MTSUN has not demonstrated that its project avoids reliability-based transmission project costs in the Billings area.

Interconnection and Network Upgrade Costs

81.   On November 4, 2016, NorthWestern's Transmission Department accepted an interconnection request from MTSUN for the project to interconnect, under the terms of a Large Generator Interconnection Agreement ("LGIA"), with NorthWestern's transmission system. Test. Klein at 15. MTSUN acknowledges that under the terms of an LGIA, MTSUN is responsible for its interconnection costs up to the point of interconnection with NorthWestern's transmission system. Idem; Hr'g. Tr. 285:17–25; MTSUN Post-Hr'g Reply Br. at 20–21. MTSUN asserts it should not be responsible for any costs of network upgrades beyond MTSUN's point of interconnection. Test. Klein at 15. MTSUN argues that the transmission system benefits of its project would outweigh any network upgrade costs associated with the MTSUN project, by eliminating or delaying the need for NorthWestern to invest in transmission projects to alleviate reliability risks in the Billings area. *Id.*

82.   NorthWestern has completed an Interconnection Feasibility Study for the MTSUN project and provided MTSUN with an initial estimate of $1,518,694 for network upgrades. Test. Autumn Mueller 4 (Mar. 17, 2017). NorthWestern states a System Impact Study and a Facilities Study will need to be completed in order to provide MTSUN with a final estimate of all network upgrades required to interconnect the project. *Id.* at 5. Once a final estimate has been calculated, NorthWestern states that negotiations with MTSUN on the terms of the LGIA may begin. *Id.* NorthWestern asserts it will not be able to determine if any transmission service upgrades will be necessary for MTSUN until NorthWestern's Transmission Division receives a request from NorthWestern's Energy Supply Division to designate the MTSUN project as a network resource. *Id.*

83.   NorthWestern asserts that MTSUN should be responsible for network upgrade costs because NorthWestern does not need any additional RECs from renewable resources until the year 2044, and therefore MTSUN would not avoid any interconnection network upgrade costs until the year 2045. Similarly, NorthWestern asserts that MTSUN should be responsible for transmission service upgrade costs that result from MTSUN's designation as a network resource. NorthWestern contends that any resource that MTSUN could potentially displace would be acquired through an RFP process in which transmission service upgrade costs would be taken into consideration. NorthWestern argues that, all else being equal, a resource that requires no transmission service upgrade costs would have a distinct advantage over other resources in the RFP and is more likely to be selected. NorthWestern therefore contends that MTSUN would not allow NorthWestern to avoid any transmission service upgrade costs and thus should be responsible for those costs. Test. Bushnell at 11–12.

84.   The Commission has previously determined that a QF is responsible only for costs that exceed "the corresponding costs which the electric utility would have incurred if it had not engaged in interconnected operations, but instead generated an equivalent amount of electric energy itself or purchased an equivalent amount of electric energy or capacity from other sources." Docket D2010.2.18, Order 7068b, ¶ 83 (Jun. 23, 2010). NorthWestern is required to evaluate transmission costs associated with avoidable resources or purchases, from which estimates of the incremental costs of QF upgrades may be informed. *Id.* ¶ 83. However, NorthWestern has not yet quantified what its avoided network upgrade costs are for energy and

capacity. Hr'g Tr. at 178–181. Similarly, NorthWestern has not quantified its avoidable transmission service upgrade costs. *Id*. at 182.

85.   In the most recent case in which the Commission addressed responsibility for network and transmission service upgrade costs for a large QF project, the Commission found NorthWestern had failed to provide an estimate of its incremental interconnection costs and, therefore, the Commission did not deduct network and transmission service upgrade costs from estimated avoided costs. *In re Greycliff Wind Prime, LLC*, Docket D2015.8.64, Order 7436d, ¶¶ 45-49, 68-69 (Sep. 16, 2016). Faced with the same situation in this case, the Commission finds that network upgrade and transmission service upgrade costs must be excluded from the avoided cost calculation.

MTSUN Integration Costs

86.   MTSUN proposes a 25-year levelized integration deduction of $1.84/MWh based on the Commission's decision in the Greycliff Wind case. Test. Klein at 15; Docket D2015.8.64, Order 7436d, ¶ 55 (Sep. 13, 2016).

87.   NorthWestern proposes an integration rate of $3.05/MWh, based on an analysis of integration requirements for solar resources in the 2015 Plan and incremental costs incurred to use the Dave Gates Generating Station to supply those integration requirements. Test. Hansen at 17.

88.   The Commission declines to adopt MTSUN's integration rate set based on a wind QF in another proceeding, in part because the underlying calculation method produces results that vary significantly with the capacity factor of the resource. Since the expected capacity factor of MTSUN is not consistent with the expected capacity factor of the Greycliff facility, the calculated integration rates for the two facilities are not consistent.

89.   NorthWestern's regulation cost calculations in this proceeding, using incremental DGGS costs, are consistent with calculations the utility has provided in other large QF proceedings. *See* Test. Hansen, Supporting Excel File, "MTSun Rate Calculation NO CPP 3.13.17," Tabs "Avoided Cost," "Reg - DGGS Variable Cost," and "Reserves." However, NorthWestern's assumed integration reserve requirement is based on a transmission system operation standard, CPS 2, which has been replaced with a new, reliability-based control standard and NorthWestern did not demonstrate the reasonableness of estimating MTSUN's

integration reserve requirement using an obsolete standard. While the notion that MTSUN will probably impose some incremental integration requirement on NorthWestern is reasonable, evidence that verifiably quantifies that requirement is lacking. Therefore, the Commission declines to adopt NorthWestern's regulation deduction.

90.   NorthWestern's proposed incremental spinning and operating reserves costs reflect its current transmission tariff and are consistent with calculation methods the Commission approved in the *Crazy Mountain* and *Greycliff* proceedings. Test. Hansen at 18; Order 7505b ¶ 105; Order 7436d ¶ 50. The Commission similarly adopts these cost estimates in this case, adjusted to reflect the approved 10-year contract term, discussed below. NorthWestern will deduct $0.84/MWh for spinning reserves and $1.35/MWh for operating reserves, for a total integration deduction of $2.19/MWh, from the avoided energy costs approved in this order.

Contract Length

91.   The MCC first raised the issue of contract length for QF PPAs in this docket in its prefiled direct testimony, and this issue was considered by the parties in the docket, as well as at the hearing. *Infra* ¶¶ 92–95. The issue of contract length and forecasting avoided cost for QF contracts has been discussed in several dockets before the Commission, including one in which the Commission explicitly asked for comments on the question of PURPA contract length question. *In re the Inquiry by the Mont. Pub. Service Comm'n into its Implementation of the Pub. Util. Regulatory Policies Act of 1978*, Docket N2015.9.74; *In re Greycliff Wind Prime, LLC*, Docket D2015.8.64; *In re Crazy Mountain Wind*, Docket D2016.7.56; *In re NorthWestern Energy's Application for Interim and Final Approval of Revised Tariff No. QF-1*, Docket D2016.5.39.

92.   The MCC contends that a 25-year contract term is excessively risky for ratepayers, and references its comments and testimony in other Commission dockets on the contract length issue:

> The forecasted inputs that go into making these 25-year avoided cost forecasts are well outside established forward strip prices, where market participants have made actual transactions based on their expectations of future prices using all available information at the time and instead rely heavily on whatever escalation factor is chosen to push the forecast beyond liquid future markets.

Test. Stamatson at 14 (citing to Comments of the MCC, Docket N2015.9.74 (Oct. 23, 2015); Additional Comments of the MCC, Docket N2015.9.74 (Dec. 23, 2015); Additional Issues Test.

Jaime T. Stamatson, Docket D2016.5.39 (Nov. 29, 2016)). The MCC states that the longer the contract, the greater the probability that the forecast avoided cost will not reflect the true avoided cost. *Id*. According to the MCC, maximum contract lengths are two years in Idaho and fifteen years in Utah and North Carolina. *Id*. at n.19.

93.   The MCC asserts that the contract term must achieve a balance between encouraging long-term contracts and ensuring QF rates are just and reasonable to electricity consumers. Post-Hearing Resp. Br. of the MCC 10 (Jun. 1, 2017). The MCC also states that because Montana law does not define "long-term," the Commission must use its discretion to set a reasonable contract term. *Id.* The MCC recommends that "[a]t a minimum, the Commission should determine avoided cost rates for MTSUN based on a contract length of twenty years, which it recently found to be 'reasonable' for Montana-Dakota Utilities Company." *Id.* (citing to Docket D2015.7.59, Order 7450a, ¶ 45 (Jul. 26, 2016)). Given the nature of the MCC's testimony in this matter, the Commission understands its use of the term "minimum" to mean that it is proposing a ceiling.

94.   MTSUN stated it prefers a 25-year PPA, but stated the project could go with something less if it had a higher price. Hr'g Tr. 87:14–15, 89: 7–9. MTSUN argues that the MCC does not truly know whether a 25-year contract term will impose less or more risk to Montana ratepayers. MTSUN'S Post-Hearing Reply Br. 32 (Jun. 12, 2017). MTSUN asserts that "without some sort of evidentiary record to support [MCC's] assertion, [its] opinion is simply speculation and conjecture." *Id.* MTSUN argues that if, as NorthWestern contends, energy markets are now quite low, QF contracts may successfully hedge future electric price increases. *Id.*

95.   NorthWestern did not take a position on contract length in this docket, but noted that the 2017 Montana Legislature was looking at reducing the maximum contract length from 25 years to 20 years, and that the Commission was deliberating contract length as an additional issue in the QF-1 Docket (D2016.5.39). Test. Bushnell at 35. NorthWestern stated it did not run any avoided cost models shorter than 25 years. *Id.* The PPA submitted by NorthWestern in this docket was for a term of 25 years. *Supra* ¶ 21.

96.   The principal objective of PURPA is to encourage the development of certain types of electric generators—small renewables and co-generation—by providing a nondiscriminatory market for the QF electric energy and capacity. Order No. 69, 45 Fed. Reg. 12,214, 12,221 (Feb. 25, 1980) (*see also FERC v. Mississippi*, 456 U.S. 742, 751 (1982)). By

requiring public utilities to purchase electric energy and capacity from QFs, PURPA provides for competition between traditional public utility generating facilities and QFs, which facilitates more efficient use of energy resources. *Id.* at 12,222. By limiting payments to QFs to the public utility's avoided cost, PURPA provides for just and reasonable rates for a public utility's customers.

97.   FERC has not set a specific contract length requirement for QF PPAs, but does permit state commissions to consider contract length when determining avoided cost. 18 C.F.R. § 92.304(e)(2)(iii). In its adoption of rules implementing PURPA, FERC recognized that, like public utilities, QFs need sufficient certainty with regard to the opportunity to recover and earn a reasonable return on their investments in electric generating facilities. 45 Fed. Reg. at 12,224. To provide for such certainty, FERC requires that QFs have the option of selling their energy and capacity to public utilities pursuant to long-term contracts at rates based on estimates of a public utility's avoided cost over the term of the contract. *Id.*; 18 C.F.R. § 292.304(b)(5), (d).

98.   The Idaho Public Utilities Commission ("Idaho PUC") limited the length of its new large PURPA contracts, those that exceed the published rate eligibility cap, from twenty years to two years.[4] *In the Matter of Idaho Power Co.'s Pet. to Modify Terms and Conditions of PURPA Purchase Agreements*, Order 33419 (Idaho Pub. Utilities Comm'n Nov. 5, 2015); *In the Matter of Idaho Power Co.'s Pet. to Modify Terms and Conditions of PURPA Purchase Agreements*, Order 33357 (Idaho Pub. Utilities Comm'n Aug. 20, 2015). Prior to this decision, the Idaho PUC had set different PURPA contract terms of 35 years, 20 years, and as short as 5 years. *Id.* at 13 (citing Idaho Pub. Utilities Comm'n Order No. 33357 at 11). In Idaho, the large QFs with a design capacity above the published rate eligibility caps have avoided cost rates that are "individually negotiated by the QF and the utility" using the integrated resource plan ("IRP") methodology based on the specific characteristics of the resource. *Id.* at 3–4.

99.   The Idaho PUC stated that in setting avoided cost rates, it is to consider "the terms of any contract or other legally enforceable obligation, including <u>the duration of the obligation</u>, the termination notice requirement and sanctions for no-compliance." *Id.* (citing 18 C.F.R. § 292.304(e)(2)(iii)) (emphasis in original). Further, because the Idaho PUC "must consider

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[4] "Published rates are available for wind and solar QFs with a design capacity of up to 100 kilowatts (kW), and for QFs of all other resource types with a design capacity of up to 10 average megawatts (aMW)." Order 33357 at 3 (Idaho Pub. Utilities Comm'n Aug. 20, 2015).

contract terms in calculating avoided cost rates – especially the length of the contract," the Commission found that "setting the length of the contract is a necessary requirement that falls to the Commission." *Id.* at 14, 16. The Petitioners argued that FERC regulations require "long-term, fixed price contracts" relying on FERC's Order No. 69 that states QFs have a "need for certainty with regard to return on investment in new technologies." *Id.* at 14 (quoting 45 Fed. Reg. at 12,224). Because the parties could not cite to a specific contract length requirement in neither PURPA nor its regulations, and the fact that in its review of Order No. 69 the phrase "long-term contract" only appears twice, the Idaho PUC maintained its original findings limiting the length of certain QF contracts to two years is left to its discretion and supported by substantial evidence. *Id.* at 6–7, 15.

100.   The Idaho PUC determined 20-year contracts were unreasonable "because the length exacerbates overestimations to a point that avoided cost rates are inconsistent with the public interest." *Id.* at 6. The Idaho PUC also found that shorter contracts have the potential to benefit both the QF and the utility's customers and that reducing the contract length to two years does not prevent a QF from selling energy to a utility for 20 years. *Id.* at 8. Further, "any asserted need for 20-year contracts was mitigated by the "must purchase" provision of PURPA" which requires the utility to purchase QF power and "as long as PURPA remains the law, the ability for QFs to earn a return remains." *Id.* at 16. The shortening of the contract length was a means to ensure avoided costs remain just and reasonable and in the public interest, and serves to "maintain a more accurate reflection of the actual costs avoided by the utility over the long-term." *Id.* at 16–17. The Idaho PUC also found that it was reasonable and logical to set the length of these non-published rate, negotiated QF contracts at two years to coincide with the 2-year planning cycle for the IRP process. *Id.* at 8.

101.   The North Carolina Utilities Commission ("NCUC") also recognized its authority to set contract length in QF PPAs. *In the Matter of Biennial Determination of Avoided Cost Rates for Electric Util. Purchase from Qualifying Facilities – 2014*, Docket E-100, SUB 140, Order Setting Avoided Cost Input Parameters, (N.C. Pub. Util. Comm'n Dec. 31, 2014). In North Carolina, the utilities had been offering long-term levelized capacity payments and energy payments for 5-year, 10-year and 15-year periods as standard options to QFs contracting to sell 5 MW or less capacity. *Id.* at 22. North Carolina statute also provides that the terms of any contract entered into between a utility and a new solar electric facility "shall be of sufficient length to

stimulate development of solar energy." *Id.* at 20 (citing N.C. Gen. Stat. § 62-133.8(d) (2017)).

The North Carolina Utilities Commission ("NCUC") rejected utility proposals to eliminate 10-

and 15-year levelized rates in 2002 and 2004, including rejecting one utility's argument that the

long-term projections of costs are inherently unreliable and proposed limiting renewing projects

to 5-year levelized rates. *Id.* at 19. In 2004,

102.   The NCUC recognized it must balance federal and state public policy that QFs

"be encouraged against the risks and burdens that long-term contracts place on customers." *Id.* at

21. The NCUC stated:

> establishing avoided cost rates based upon the best information available at the
> time and making such rates available in long-term fixed contracts, as required by
> Section 210 of PURPA should leave the utilities' ratepayers financially indifferent
> between purchases of QF power versus the construction and rate basing of utility-
> built resources.

Id. at 21. When considering whether or not to extend the maximum standard contract term to 20

years, the NCUC found that a 20-year contract "may tilt the balance too much in the QFs'

direction and increase the risks and burdens to ratepayers" and decided not to extend the

maximum term length to 20 years. *Id.* The NCUC found no evidence to justify altering earlier

decisions on term length and related provisions, holding that utilities should continue to offer

long-term levelized capacity payments and energy payments for 5-year, 10-year, and 15-year

periods. *Id.* at 19–22. The NCUC also found that the method by which avoided costs are

calculated should remain consistent in both standard and negotiated contracts, meaning a method

applicable to calculating the avoided costs of a small QF should be the same as the method for

calculating avoided costs for a large QF. *Id.* at 21. Further, citing FERC's order implementing

Section 210 of PURPA that states the goal is to make ratepayers indifferent between a utility

self-build option or alternative purchase and a purchase from a QF, the Commission recognized

that a utility's commitment to build a plant represents a similar type of long-term fixed

obligation for the utility's customers, based on forecast of future prices. *Id.* at 20.

103.   Just as other states have interpreted FERC rules to allow state Commissions to set

duration of QF contracts as part of state authority granted under PURPA, Montana law similarly

recognizes the Commission's authority over PPAs between the utility and QFs, including the

need to provide sufficient certainty with regard to the opportunity for QFs to recover investments

in qualifying electric generating facilities. Mont. Code Ann. §§ 69-3-601 to -604 ("Montana

Mini-PURPA"). The Montana Legislature authorized the Commission to encourage long-term

QF contracts "in order to enhance the economic feasibility" of QFs and to set rates "using the avoided cost over the term of the contract." Mont. Code Ann. § 69-3-604 (3)–(4). Neither PURPA, nor FERC rules implementing PURPA, nor Montana Mini-PURPA, precisely define the meaning of "long-term," thereby leaving the definition of "long-term" to the Commission's interpretation.

104.   A definition of "long-term" appears in the Commission's rules on default electric supplier procurement guidelines that provide policy guidance on long-term electricity supply resource planning and procurement. Mont. Admin. R. 38.5.8201(2). "Long-term" is defined as: a time period at least as long as a utility's electricity supply resource planning horizon. Mont. Admin. R. 38.5.8202(7). "'Planning horizon' means the longer of: (a) the longest remaining contract term in a utility's electricity supply resource portfolio; (b) the period of the longest lived electricity supply resource being considered for acquisition; or (c) ten years." *Id.* at 38.5.8202(8). This rule suggests that "long-term" is minimally understood as ten years.

105.   The Commission recognizes that FERC regulations recognize QFs have "a need for certainty with regard to return on investment in new technologies," as well as "to be able to estimate, with reasonable certainty, the expected return on a potential investment before construction of a facility," and this return is in part determined by the price at which the QF can sell its electric output. 45 Fed. Reg. at 12,218, 12,224 (*see* 18 C.F.R. § 292.302). Montana law also requires the Commission to encourage long-term QF contracts "to enhance the economic feasibility" of QFs. Further, the Commission is also bound by other obligations in order to implement PURPA and FERC's regulations, including that rates for QF purchases be just and reasonable to electric consumers and consistent with the public interest, and also not discriminate against QFs. 16 U.S.C. § 824a–3(b) (2012); 18 C.F.R. § 292.304(a). The Commission finds that "long-term contracts" should be interpreted in accommodation with PURPA and the rules implementing PURPA, as well as Montana law, and a determination of "economic feasibility" must be considered from the perspective of the QF developers and the ratepayers. *See* Comments of the Montana Consumer Counsel, Docket N2015.9.74, 3 (Oct. 23, 2015) (MCC's discussion on the Commission's responsibility to balance the economic feasibility of the QF, accurate avoided cost rates to the utility, and just and reasonable rates for electric consumers). FERC regulations direct state commissions to consider the terms of any contract, including the duration of the obligation, when determining avoided costs. 18 C.F.R. §292.304(e)(2)(iii). The Commission

finds that determining the duration of a QF PPA is a necessary requirement that falls to the Commission in making an avoided cost determination.

106. The Commission will depart from its recent precedent of 25-year contracts and finds that a 10-year contract for QF PPAs is just and reasonable, and the 10-year length is consistent with direction from other Commission rules defining "long-term." *Supra* ¶ 104. This Commission finds the ability to ensure avoided cost rates remain accurate is best accomplished through successive contracts without the risk of violating FERC regulations or unreasonably burdening customers. The Commission's departure from 25-year contracts is described below.

107. The low prices that appear in near-term market forecasts relative to previous forecasting suggest that the market is increasingly saturated with energy. *See* Test. Hansen at 10:4–12; Hr'g Tr. 60:7–16, 143:3–15, 211:21–212:2, and 215:13–217:5. Price escalators in outer years serve to inflate those prices, which may not occur if the current trend of oversupply continues. Even though the Commission affords a great deal of consideration and due process to the evaluation of the appropriate escalators, they are in the end hypothetical, and the very use of them for a multi-decadal contract shifts this forecasting risk to consumers, and not to investors in power projects. This is the same risk that the Commission identified in *Greycliff* and again grappled with in *Crazy Mountain*. Order 7436d ¶ 37 (NorthWestern argues "that it has acquired a supply portfolio to protect its customers from the market, and to pay Greycliff market when the portfolio is long would re-expose customers to market risk"); *In re Greycliff Wind Prime, LLC*, Docket D2015.8.64, Order 7436e, ¶ 18 (Oct. 21, 2016) ("As with any long-term fixed-cost resource acquisition whose economic justification depends on projections of market prices, there is a risk that actual market prices will diverge from the projections, rendering the acquisition decision more or less economic in hindsight."); Order 7505b ¶¶ 66–84 (discussing long period adjustments and market price risk from QF power); Order 7505c ¶¶ 25–35 (discussing using the Long-1 adjustment as a proxy for market price forecast risk).

108. The Commission finds persuasive the testimony of the MCC that longer contract lengths are excessively risky for utility ratepayers. The MCC pointed to Idaho and North Carolina regarding their contract length and encouraged the Commission to consider implementing some type of reduction to protect consumers and establish more accurate avoided cost rates as those states have attempted to do. The Commission finds that a 25-year maximum contract length exposes customers to undue market forecast risk. In combination with the

inaccuracy of long-term forecasts, a 25-year contract increases the possibility that customers will pay above-market prices for the output of QFs. Based upon its sufficient technical expertise in avoided cost determinations, including contract length discussions in other dockets before the Commission, as well as the testimony provided by the MCC in this docket, the Commission finds that establishing a contract length of ten years provides sufficient encouragement for QF development while adequately mitigating forecast risk for customers.

109.   Like other states, this Commission has a history of authorizing QF contracts for terms as long as 20 to 35 years. Just as the Idaho PUC and the NCUC determined 20-year contracts were unreasonable and inconsistent with the public interest, and also recognizing that neither PURPA nor its implementing regulations specify a mandatory length for PURPA contracts, this Commission finds that its 10-year contract length determination for QF PPAs is just and reasonable and in the public interest. Further, the 10-year contract length is consistent with direction from other Commission rules defining "long-term." *Supra* ¶¶ 98–104. This Commission finds the ability to ensure avoided cost rates remain accurate, just and reasonable, and in the public interest, is best accomplished through contracts shorter than twenty-five years, without the risk of violating FERC regulations or unreasonably burdening customers.

110.   The Commission finds a PPA shorter than twenty-five years is not intended to inhibit a QF's ability to recover its investment, but functions as a means to ensure avoided costs remain just and reasonable and in the public interest, and maintains a more accurate reflection of the actual costs avoided by the utility over the long-term." Further, the "must purchase" provision of PURPA requires the utility to purchase QF power as long as PURPA remains the law and as long as QF projects continue to offer power to utilities. As long as PURPA remains the law, the utility will be required to purchase QF power after the PPA expires in ten years.

111.   The Commission's practice is to not impose conditions on QFs that do not consistently apply to other power supply resources:

> The methods used to attribute value to energy and capacity that would be produced by a resource the utility plans to own must be consistent with methods used to attribute value to energy and capacity that would be produced by a QF, if avoided cost-based rates are to be nondiscriminatory.

Order 7436e ¶ 16.

112.   The Commission has previously rejected methods of estimating avoided costs for QFs that deviate from the methods used to evaluate other utility resource acquisitions, and has

approved avoided cost methods that have been applied to evaluate non-QF resources. Docket D2015.8.64, Order 7436d, ¶ 38, ¶ 41 (rejecting adjustments to forecast prices because NorthWestern did not "proposed similar adjustments in valuations of its own intermittent resources"), ¶ 35 (finding that an adjustment to the basis differential between Montana and Mid-C forward market pricing is reasonable because it has been consistently applied); Docket D2015.8.64, Order 7436e, ¶¶ 15-17 (Nov. 4, 2016) (rejecting "different treatment of QFs" versus NorthWestern-owned resources and observing "NorthWestern's approach to calculating avoided costs is out of sync with its approach to evaluating alternative resources"); Docket D2016.7.56, Order 7505b, ¶ 77 (Jan. 5, 2017) (accepting a novel adjustment because NorthWestern had begun to "use[d] a spreadsheet-based model to evaluate the expansion of its Ryan Dam facility which values its output in a way which is identical to one part of the adjustment that NorthWestern proposes for [a QF]"), ¶ 84 (with respect to the same adjustment, holding "in order to ensure fair evaluation of QF resources, the Commission expects that the utility will model all resources in this way"); Docket D2016.7.56, Order 7505c, ¶ 28 (April 18, 2017) (observing a QF "notes, correctly, that it would be impermissible to rely on the Ryan Dam model if NorthWestern's own resources were not subjected to this same modeling"); and ¶ 56 (ordering "NorthWestern shall model all new electricity supply resources or additions to existing resources consistent with" the Ryan Dam methodology). The Commission rejects discriminatory treatment of QFs and requires symmetric treatment of non-QF resources with respect to measures adopted for QFs.

113.   As the Commission observed when it previously confronted this issue, NorthWestern's own resources are "contributing to the very risk that they purportedly seek to offset here." There is "no persuasive evidence to demonstrate that the market forecast risk of a long-term QF PPA differs significantly from the market forecast risk of a company-acquired generating resource." Order 7505b ¶¶ 73–74.

114.   Addressing excessive forecast risk necessarily requires symmetrical treatment of QFs and non-QFs so that, in limiting contract lengths, the Commission does not engage in discriminatory rate making for QFs. Therefore, the Commission finds that, going forward, any resource the utility acquires or contracts with must be subject to the same standard.[5] Thus, if NorthWestern buys or builds a power plant or enters a contract with any power supplier for purposes of serving utility customers, it must demonstrate that the cost of the resource's energy

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[5] This does not apply to assets already owned or under contract, whether QFs or non-QFs.

and capacity are justified relative to a 10-year projection of market prices or the cost of alternative 10-year sources of energy and capacity. The Commission will not initially authorize NorthWestern rate revenue for more than ten years for such resources. Instead, at the end of the 10-year period the Commission may provide for subsequent rate revenue based on a consideration of the value of the asset to customers and not necessarily based on the costs of the resource. This approach protects consumers systematically from market forecast risk and ensures non-discriminatory treatment of QFs and other potential utility resources, as required by PURPA.

115.   Based on the testimony from the MCC in this docket and the Commission's review of permissible contract lengths in other states, the Commission finds the 10-year contract length for QF PPAs is just and reasonable and in the public interest, is nondiscriminatory to QFs as it is also ordered to symmetrically apply this treatment to utility assets, and the Commission finds that a 10-year contract length is sufficient to encourage QF development under PURPA and Montana law. *See* Order 7500c. In setting contract length at 10 years, the Commission is acting well within its authority under FERC regulations, and has established a just and reasonable rate that reflects reasonable estimates of a utility's avoided costs.

CONCLUSIONS OF LAW

116.   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.

117.   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).

118.   "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).

119.   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." Order 7505c ¶27 (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) (emphasis added)).

120.   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)).

121.   "[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").

122.   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).

123.   "All 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." Mont. Admin. R. 38.5.1902(5).

124.   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." Mont. Admin. R.

38.5.1903(2)(b).

125.   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." Mont. Admin. R. 38.5.1905(2).

126.   The 10-year contract length for QF PPAs is just and reasonable and in the public interest, and is nondiscriminatory to QFs as it is also ordered to symmetrically apply this treatment to utility assets.

127.   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.

ORDER

IT IS HEREBY ORDERED THAT:

128.   NorthWestern's request to strike MTSUN's PPA attached to its Post-Hearing Reply Brief is GRANTED.

129.   Carbon costs will not be included within the calculated avoided cost, consistent with *Supra* ¶¶ 57–61 of this Order until otherwise ordered.

130.   The PPA between MTSUN and NorthWestern will be set for ten years.

131.   The Commission adopts symmetrical treatment to non-QF resources consistent with *Supra* ¶¶ 111–115, 126 of this Order until otherwise ordered.

132.   The Commission estimates an avoided cost rate of $16.98/MWh in all hours, and a capacity rate of $10.53, to be paid only in peak load hours. Supra ¶¶ 61, 76, 90. NorthWestern must submit compliance work papers, based on the Commission's decisions in this Order, to verify these avoided cost estimates within ten days.

DONE AND DATED this 29th day of June, 2017, by a vote of 5 to 0. Commissioner Lake dissenting on paragraphs 106–115, and 126, involving 10-year contract length and symmetrical treatment to utility assets. And Commissioner Kavulla dissenting to the motion to on paragraphs 57–61 involving removing carbon cost from the energy price forecast, provided energy credits be retained by the QF.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

BRAD JOHNSON, Chairman
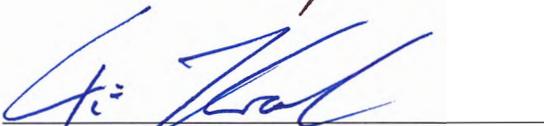
TRAVIS KAVULLA, Vice Chairman

ROGER KOOPMAN, Commissioner
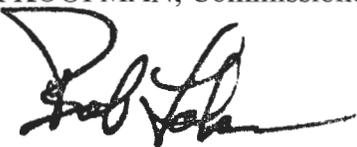
BOB LAKE, Commissioner

TONY O'DONNELL, Commissioner

ATTEST:

Mike Maas
Administrative Assistant

(SEAL)