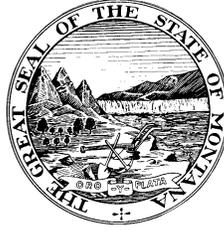


PUBLIC SERVICE COMMISSION
STATE OF MONTANA



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Bob Lake, Vice Chairman
Kirk Bushman, Commissioner
Travis Kavulla, Commissioner
Roger Koopman, Commissioner

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December 27, 2013

Mr. Patrick R. Corcoran, Vice President
Government and Regulatory Affairs
NorthWestern Energy
40 East Broadway
Butte, MT 59701

RE: Data requests in Docket D2013.12.85

Dear Mr. Corcoran,

Enclosed please find data requests of the Montana Public Service Commission to NorthWestern Energy (NWE) numbered PSC-001 through PSC-035 in the above-referenced Docket. Please begin the response to each new numbered data request on a new page. Please provide responses by January 6, 2014. If you have any questions, please contact me at (406) 444-6191.

Sincerely,

Neil Templeton
Regulatory Division
Montana Public Service Commission

Service Date: December 27, 2013

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

* * * * *

IN THE MATTER OF NorthWestern Energy's) REGULATORY DIVISION
Application for Approval to Purchase and)
Operate PPL Montana's Hydroelectric Facilities,) DOCKET NO. D2013.12.85
for Approval of Inclusion of Generation Asset)
Cost of Service in Electricity Supply Rates, for
Approval of Issuance of Securities to Complete
the Purchase, and for Related Relief

**DATA REQUESTS PSC-001 THROUGH PSC-035 OF THE
MONTANA PUBLIC SERVICE COMMISSION
TO
NORTHWESTERN ENERGY**

PSC-001

Regarding: Confidential Information Memorandum
Witness: Unknown

Please provide the Seller's Confidential Information Memorandum referred to at TEM-7:13-14 and on JMS:7 and JMS:14. If NWE believes a new Protective Order is necessary for this material, please provide, simultaneously with a Motion for Protective Order by the response deadline, a redacted copy of the CIM that includes that information for which protection is not sought.

PSC-002

Regarding: Preliminary Value Indications
Witness: Bird

Please provide the "preliminary value indications from early 2009 right up until the time the assets came up for sale" that are referred to in 4:14-15.

PSC-003

Regarding: Prior Bid for PPLM assets
Witness: Bird

- a. Did NWE use substantially the same methods of valuation to calculate its bids for the PPLM assets described at 7:13-16 of your testimony? Please explain any difference.
- b. Please provide any model, whether DCF or LT Rev Req or other, or other written analysis that NWE used to inform these bids.
- c. Please explain further the environmental concerns associated with the PPLM coal assets, and describe the process and amount of negative value that NWE quantified to be associated with those concerns, isolating each concern as an individual liability to the extent that NWE did so.
- d. Please explain further the sale lease-back provision associated with the PPLM coal assets, and describe the process and amount of negative value that NWE quantified to be associated with that provision.

PSC-004

Regarding: PPL's Feb. 2013 Discontinuation of Negotiations
Witness: Bird

If it exists in writing, please provide the communication referenced at 9:11-13. If it is not a written communication, identify the persons involved in the communication, and provide as much detail as you recall about the communication.

PSC-005

Regarding: Coal Asset Sale
Witness: Bird

- a. Provide a written copy of the "due diligence" referred to at 10:3.
- b. Did NWE conduct a market valuation of the coal assets exclusively before making the determination not to bid in the process described at 9:15-10:7? Why or why not?
- c. If NWE did conduct a market valuation of the type described in (b), please provide it.

PSC-006

Regarding: Differences Between Models
Witness: Bird

With respect to the statement on 15:3-4, what were the "other inputs" included in Finance's 30-year Rev. Req. model that were not included in the DCF Model?

PSC-007

Regarding: Cost of Capital
Witness: Bird

- a. Explain how Exhibit BBB-5 supports the conclusion at 38:2-5 of your testimony that “the current ROE range for NorthWestern is 9.64% to 11.14% with a midpoint ROE of 10.39%,” in light of the fact that there seem to be both lower and higher results listed on the exhibit.
- b. Please provide the underlying analysis conducted to derive BBB-5 and any electronic files or spreadsheets that were employed.

PSC-008

Regarding: Economic Benefits
Witness: Bird

- a. On p. 45 you testify that “First, the certainty of stable electricity prices will help attract businesses and jobs, benefitting Montana’s economy.” Please provide evidence that the expected “stable” increase to rates proposed by NorthWestern will attract new investment and job creation between now and the expected crossover point in 2024.
- b. On p. 45 you testify that “Second, NorthWestern is the largest property taxpayer in the state and one of the largest employers; what is good for NorthWestern is good for Montana. Thus, NorthWestern works hard to enhance economic development, encourage employee volunteer efforts, provide resources to support community needs, and invest in the state.” Do you expect property taxes on the hydro assets to increase if NorthWestern acquires the assets from PPLM? Would you expect the local and statewide benefit from increased property taxes to offset the economic cost associated with increased electricity supply costs?
- c. To the extent the testimony cited in (b) is a general statement regarding the probable effect of the Commission’s decision in this proceeding on NorthWestern’s expected investment in local community and statewide resources, please describe in more detail how the Commission’s approval or not of the application will likely affect NorthWestern’s commitment to the stated investments.

PSC-009

Regarding: Studies
Witnesses: Bird, Kliewer, Stimatz and/or other

- a. Please confirm that NWE has not conducted a depreciation study relative to the dams.
- b. Please confirm that NWE has not conducted a cost of capital study using the earnings and projected growth of a proxy group of publicly traded companies to determine the suggested ROE of 10.0 percent.

- c. Please confirm that Ascend conducted modeling of the Hydros only after NWE agreed to acquire them from PPLM.

PSC-010

Regarding: Revision to LT Rev Req Model

Witness: Meyer

- a. Please confirm that the differences between the market curve (\$'s per MWh) in Row 36 of Exh. TEM-1 and Row 39 of Ex. TEM-2 are solely the result of the adjustments described at 18:5-16 of your testimony (i.e., the basis adjustment revision and the conversion from a simple average of a 12-month ATC to a more precise monthly on-peak and off-peak price weighted to the production forecast of the Hydros). If there are other differences, please explain them.
- b. Is the market curve you used in Exh. TEM-2 the same as the forward market estimates represented on Exh. JMS-2?

PSC-011

Regarding: Generator Production & Market Curve Forecasts

Witnesses: Stimatz or Meyer

- a. Provide the monthly production estimates of the Hydros on which Exh. TEM-2 relies.
- b. Provide the primary-source documentation that supports the market price forecast for electricity and natural gas prices represented on Exh. JMS-2.

PSC-012

Regarding: Modeling of Risk to Dams' Output

Witness: Stimatz

- a. Did NWE conduct any versions of the DCF or LT Rev Req modeling runs where expected generation changed (for instance, as a result of a prolonged drought or major outage at a large dam), or was there only one deterministic estimate of Hydros' output for these models' purposes?
- b. To what extent has NWE compared the 5- and 20-year production history to the longer history of flows on the Madison-Missouri, Clark Fork, and West Rosebud waterways? Provide any due diligence conducted in reference to this topic.

PSC-013

Regarding: Market Forecast

Witness: Stimatz

- a. Please describe the differences between your method of calculating the forward per-MWh market price to the method the Commission adopted in D2012.1.3 for the

- purposes of calculating an avoided cost. Where a difference exists, explain why you believe it is warranted.
- b. Please describe the differences between your method of calculating the forward per-MWh market price to the method that NWE proposed in D2012.1.3. Where a difference exists, please explain why NWE has departed from its previous method of estimating forward market prices.
 - c. The forecast includes an inflation rate of 2.1% applied to prices after a certain year. Please explain the basis of this factor.

PSC-014

Regarding: Basis Differential
Witness: Stimatz

Are you estimating the basis differential differently than NWE calculates the basis differential for the purposes of arriving at a revenue credit for the value of non-firm energy produced by Dave Gates Generating Station, which is credited back to regulation customers of the plant? If the methodology differs here, please explain the difference, including the reason why it is reasonable to treat the basis differential in a non-identical manner in these two circumstances.

PSC-015

Regarding: Carbon Forecast
Witness: Stimatz

- a. How did NWE settle on 2021 as the year when a significant per-ton carbon price would take effect?
- b. Did NWE run alternatives to the 2021 carbon price through its LT Rev Req or DCF models? If so, provide. If not, explain why not.
- c. Please evaluate your DCF model using a carbon price equal to zero in all periods.
- d. Is NWE aware of current and forward carbon prices where it is today traded, and did NWE attempt to make use of these indicators?
- e. Did NWE make reference to other utilities' integrated resource plans (such as MDU's) and how they attempt to price the risk of carbon regulation, before settling on the method presented in your testimony?

PSC-016

Regarding: PowerSimm
Witness: Stimatz or other

- a. Does the “risk premium” in PowerSimm’s NPV calculations for various scenarios include a quantification of risk associated with water flows, major plant outages, and the liabilities inherent in owning large dam structures (such as plant failure due to seismicity)? Explain for each of these things how PowerSimm incorporates and measures the associated risk.
- b. Ascend concludes, through its modeling, that “the expected cost of the Current Plus Hydro portfolio is lower than the expected cost of the Current Plus CC portfolio and the expected cost of the Current portfolio even before accounting for the differences in risk.” (JMS-44:1-4). In the LT Rev Req model, meanwhile, the “procure at market” scenario is less costly than the Hydro/Mustang portfolio, before accounting for risk. Please explain this discrepancy.
- c. Was there any thought of using PowerSimm prior to NWE’s submission of a bid, and thus better inform the utility of the Hydros value on a portfolio basis?
- d. Is Mr. Stimatz an expert with respect to the PowerSimm model? If so, please describe his experience with the model.
- e. Please identify the Ascend consultant(s) who was responsible for running or helping to run the PowerSimm modeling for NWE.

PSC-017

Regarding: 2013 Procurement Plan prior to PPLM-NWE Agreement
Witness: Stimatz or other

- a. Please describe the state of work on the 2013 Resource Procurement Plan prior to the incorporation of the Hydros into modeling exercises.
- b. If (a) does not address the subject, please specifically identify any key modeling inputs (e.g., carbon price) that had been settled upon prior to the Sept. 2013 PPLM-NWE agreement.
- c. If (a) does not address the subject, please explain the written product that had been created in advance of the Hydro acquisition in Sept. 2013, and explain also whether any modeling runs had been conducted prior to that date.

PSC-018

Regarding: Cap-Ex Estimates

Witness: Meyer, Stimatz, Rhoads, and/or other

- a. For each year represented in the LT Rev Req Model and the DCF Model, please provide an itemized list of the capital expenditures included in the exhibits as aggregate figures (i.e., Row 21 in TEM-2; Row 29 in JMS-1.)
- b. With respect to the answer at JMS-14:5-11, further describe how these capital expenditure estimates were assembled.
- c. Detail each instance where NWE's cap-ex estimates, represented in the above exhibits, departs from the PPLM estimates mentioned on JMS-14:7-8.
- d. When did PPLM create its estimates of future cap-ex requirements?
- e. Describe what NWE did to check the future cap-ex requirements of the Hydros against other similar hydro facilities in the United States and elsewhere.

PSC-019

Regarding: Operational and Engineering Issues

Witness: Rhoads

Has your testimony related a full account of the "operational and engineering issues" referred to at 10:5-6 of your testimony? If not, please provide a full explanation of what you mean by this statement.

PSC-020

Regarding: FERC Regulation of Hydros

Witness: Rhoads

Has FERC ever directed these dams' licensees to take the kind of action to remedy significant deficiencies, referred to on 13:2-4 of your testimony? If so, please describe those circumstances.

PSC-021

Regarding: Condition of Facilities

Witness: Rhoads

- a. Mr. Rhoads testifies at WTR-17 that "[r]ecent available reporting indicates that generally the structures in the hydro system are in satisfactory condition and well maintained." Do any structures in the system not meet this characterization? If so, please explain.
- b. Does the recent available reporting cited above refer to CB&I's Independent Engineer's Final Report of January 1, 2013, the Addendum to Independent Engineer's Final Report of June 25, 2013, or the Due Diligence Report supplementing

Engineer's Final Report of September 6, 2013? If no, please cite and provide (if not provided elsewhere in testimony) the reporting referred to.

PSC-022

Regarding: FERC Correspondence with Licensee
Witness: Rhoads

Please provide a full set of the correspondence between PPLM and FERC described on 18:6-17 of your testimony.

PSC-023

Regarding: Hebgen
Witness: Rhoads

- a. Provide a detailed description of the rehabilitation of the Hebgen intake structure and low-level outlet conduit described at 21:15-19 and 22:10-14 of your testimony, including a capital budget and timeline.
- b. What is the worst case scenario of the risk identified for Hebgen by the Part 12 report, the Potential Failure Mode 2—failure of the intake structure under seismic loading.
- c. Please describe the dam owner's liabilities in the scenario described in (b). Has NWE quantified the possible damage to life and property resulting from such a scenario?

PSC-024

Regarding: Madison
Witness: Rhoads

- a. Provide a detailed description of the stability of the rock at the left abutment of Madison Dam, described at 22:15-17, including a capital budget and timeline of remediation activities.
- b. What is the worst case scenario of this risk?
- c. Please describe the dam owner's liabilities in the scenario described in (b). Has NWE quantified the possible damage to life and property resulting from such a scenario?

PSC-025

Regarding: Thompson Falls & Kerr Seismic Review
Witness: Rhoads

Please explain when the review of the seismic risk to these two dams described at 22:6-9 will be complete.

PSC-026

Regarding: Total Number of Generating Units and System Reliability
Witness: Rhoads

- a. Do upgrade plans exist that would reduce the number of generating units in any specific hydro facility, similar to how the recent renovation at Rainbow reduced the generating units from eight to one? If yes, please identify the specific facilities and provide documentation of the plans.
- b. If the answer to the preceding question is no, is it conceivable that future upgrades would involve a reduction of the number of generating units in any particular plant?
- c. Has NWE made any effort to evaluate how any future reduction in the number of total generating units in the hydro system may affect system reliability? If yes, please provide documentation of such evaluation.

PSC-027

Regarding: Major Upgrades
Witness: Rhoads

On a Dec. 12, 2013 site visit to Rainbow Dam by MPSC staff, PPLM personnel noted that the Rainbow upgrade was undertaken in relation to the FERC re-licensing of the complex, since FERC expects greater and more efficient usage of dams than the federal agency licenses.

Please explain whether the forward cap-ex budget includes expectations of large upgrades of this variety. And, if not, explain why NWE believes that forecasting such upgrades is not necessary, for instance around 2025 when Thompson Falls' FERC license is up for renewal.

PSC-028

Regarding: Generator Rewind
Witness: Rhoads

- a. Describe the purpose of a generator re-wind.
- b. How often, and why, does a typical generator need to be re-wound?
- c. When do you anticipate that the generators listed on Exh. WTR-9 will next need to be re-wound, and does the capital budget in the Meyer and Stimatz testimony incorporate these estimates?

PSC-029

Regarding: Sufficiency of Capital Budget
Witness: Rhoads

Please explain the basis for this statement that “the capital upgrade program is consistent with industry practice to maintain reliability.” (31:6-7) To what extent has NWE conducted comparisons of the cap-ex program of PPLM assets to other dams of a similar vintage and design?

PSC-030

Regarding: Capital Budget for Environmental Upgrades
Witness: Rhoads

Is any significant cap-ex included in the capital budget forecast that concerns the environmental issues described on pages 35-45 of your testimony?

PSC-031

Regarding: Risks Associated with Environmental Issues
Witness: Rhoads

Has NWE quantified the risk associated with the environmental issues described on pages 43-45 of your testimony. If so, please describe these efforts. If not, please explain why these risks have not been quantified and included within the models presented in the Stimatz and Meyer testimonies.

PSC-032

Regarding: Forced Outages
Witness: Rhoads or other

- a. Provide a description of the significant forced outages (for the purposes of answering this question, lasting more than a week) of the Hydros during PPLM’s ownership of them. Please include details about their duration, their causes, and what was done to remedy the outage, including costs to PPLM.
- b. Were adjustments for outages (both forced and voluntary, for instance during maintenance) made in the projection of generation of the Hydros that is used by Stimatz and Meyer?

PSC-033

Regarding: Documents Related to Environmental Issues
Witness: Rhoads

To the extent the following documents were not provided with the application, please provide them. If they have been provided, please provide a citation to where they can be found.

- a. The MOUs between PPLM and resource agencies referred to at 38:8-23.
- b. The resource plans described at 39:1-16.
- c. The programmatic agreements described at 39:18-40:2.

PSC-034

Regarding: Projected Bill Impacts
Witness: DiFronzo

Please provide electronic copies of Exhibit_(PJD-3) reworked to compare expected charges with and without the PPL hydro assets in July 2014, January 2015 and July 2015.

PSC-035

Regarding: Exhibit_(PJD-2)
Witness: DiFronzo

Please provide copies of all on and off-system, fixed and index price purchase and sale agreements associated with the volumes found in rows 9-21, 32-33, and 42-43 of Exhibit_(PJD-2), page 4. In addition, please provide copies of all Requests for Information and Request for Proposals associated with these agreements.