



January 16, 2014

Ms. Kate Whitney
Montana Public Service Commission
1701 Prospect Avenue
P. O. Box 202601
Helena, MT 59620-2601

RE: Docket No. D2013.12.85
PPLM Hydro Assets Purchase
Two replacement pages for the Prefiled Direct Testimony of John D.
Hines submitted December 20, 2013

Dear Ms. Whitney:

Eric Eck recently called our attention to an apparent discrepancy on page JDH-29 of the Prefiled Direct Testimony of John D. Hines. Upon examination, it was discovered that due to a minor edit made just prior to duplicating, two lines were inadvertently omitted from the very bottom of that page, and two duplicate lines from the previous page were inadvertently repeated at the top, resulting in two incomplete sentences. The two sentences should read as follows:

For the initial bid analysis, NorthWestern relied, in part, on a deterministic comparison that did not explicitly consider risks. As described below, the Current plus Hydro alternative compares favorably with the Current plus CC and market purchases alternatives even using the more conservative evaluation methodology.

Further examination revealed that due to the same minor edit, a bullet point was also inadvertently omitted from the bottom of page JDH-23. It reads as follows:

- Dam safety programs are in compliance with FERC regulations and license requirements;

Enclosed are copies of the two corrected pages, JDH-23 and JDH-29. The remainder of the testimony is correct as filed. Because the filing is two-sided, pages JDH-24 and JDH-30 have been reproduced on the back sides of the corrected pages, for ease of page replacement.

1/16/14 Whitney Letter
Page 2 of 2

Thank you in advance for your understanding. Please don't hesitate to call me at (406) 497-2122 with any questions.

Sincerely,



Bobbi Stauffer
Regulatory Process Manager

Enclosures

cc: Service List

CERTIFICATE OF SERVICE

I hereby certify that original and ten copies of NorthWestern Energy's two replacement pages JDH-23 and JDH-29 for the Prefiled Direct Testimony of John D. Hines, in the Application for Approval to Purchase and Operate the Hydroelectric Facilities of PPL Montana, LLC in Docket No. D2013.12.85 filed on December 20th has been mailed to the most current service list in this Docket and e-filed on the Montana Public Service Commission's website.

Date: January 16, 2014



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Docket No D2013.12.85
Hydro Assets Purchase
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1 employee who helped lead the FERC relicensing process for many of the
2 generation facilities for MPC. This level of internal hydro experience (in
3 marketing, engineering, operations, and licenses) provided NorthWestern
4 with a significant body of knowledge that allowed us to efficiently conduct
5 due diligence including being able to evaluate the information from
6 PPLM's CIM with a critical eye. In addition to our internal team, North-
7 Western also assembled consultants to provide expertise, experience, and
8 analysis concerning legal, engineering, and environmental subjects.

9
10 **Q. What conclusions did NorthWestern reach after completing its due**
11 **diligence on the Hydros?**

12 **A.** The due diligence provided NorthWestern with the basis for developing
13 the \$900 million bid which was based upon a reasonable set of
14 assumptions that included: longevity of the hydroelectric generation
15 assets, estimates of operating expenses, expected capital investment, and
16 safety of the facilities. As I noted previously, due diligence continued
17 throughout the summer and resulted in NorthWestern gaining further
18 confirmation of the valuation assumptions. Specifically, Northwestern
19 concluded:

- 20 • PPLM has made significant operational, maintenance, and capital
21 investment in the hydroelectric generation assets;
- 22 • Dam safety programs are in compliance with FERC regulations and
23 license requirements;

- 1 • A stand-alone resource cost comparison which looks at the
- 2 levelized cost of:
- 3 ○ the Hydros, on a per-MWh basis,
- 4 ○ a CCCT (239 MW effective and economically dispatched)
- 5 on a per-MWh basis, and
- 6 ○ market purchases sufficient to meet portfolio requirements.

7 These metrics can be modeled and considered both without explicitly
8 incorporating risk and with incorporating risk (deterministic and stochastic
9 analyses respectively).¹

11 **Q. Did NorthWestern employ a stochastic analysis at the time of the**
12 **initial valuation?**

13 **A.** No. While risk was modeled in past electric procurement plans and in the
14 Spion Kop evaluation using the GenTrader model, NorthWestern did not
15 have a stochastic model available in June 2013. In 2012 NorthWestern
16 began investigating alternative stochastic models and eventually
17 purchased Ascend Analytics' PowerSimm model to support our planning
18 and acquisition processes. However, before we could use the
19 PowerSimm model we had to input extensive amounts of data and also
20 conduct output validation tests. For the initial bid analysis NorthWestern
21 relied, in part, on a deterministic comparison that did not explicitly consider
22 risks. As described below, the Current plus Hydro alternative compares

¹ Deterministic analysis refers to the lack of randomness in the modeling. Conversely, stochastic analysis refers to the application of probabilities to certain key variables that results in the identification and valuation of risks.