

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

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

**MONTANA CONSUMER COUNSEL RESPONSE BRIEF  
REDACTED VERSION**

Montana Consumer Counsel (MCC) submits this post-hearing brief pursuant to  
Procedural Order No. 7323b.

**I. Introduction**

NorthWestern Energy (NWE) filed this Application requesting that the  
Montana Public Service Commission (PSC or Commission) preapprove the  
electric utility’s plan to acquire eleven hydroelectric generating facilities (Hydros)  
from PPL Montana (PPL). NWE has agreed to pay \$900 million for these  
facilities, previously purchased by PPL from Montana Power Company, and will  
receive \$30 million for the Kerr resource when it is transferred next year to the  
Confederated Salish and Kootenai Tribes pursuant to a preexisting agreement. Of  
the \$900 million bid, the book cost of the facilities is \$553,078,225, leaving

\$346,921,775 in acquisition premium. The 633 MW capacity of the Hydros will be reduced to 439 MW upon the Kerr transfer.

Long term resource investments require many assumptions that extend far into the future. A Discounted Cash Flow (DCF) analysis is commonly used in business valuations and acquisitions, and was a central component of NWE's analysis in this case. NWE's initial DCF analysis resulted in a value of \$826 million. A key driver of that value is NWE's assumption that significant carbon regulation costs will be imposed by 2021, and will increase thereafter at a 5% annual rate. This carbon adjustment to market price forecasts adds \$247 million, or roughly 30% of the DCF-estimated value. Other key assumptions that formed the basis for NWE's higher bid relate to the low level of capital expenditure projections and a large terminal value. All of these assumptions create significant risks that the valuation could turn out to be incorrect. NWE asks the Commission to assign the responsibility for all of these risks to its ratepayers.

There is no dispute that the requested approval would immediately increase rates to NWE's electric customers. NWE originally requested a \$128.4 million test year revenue requirement associated with the Hydros. This has subsequently been reduced to \$117.1 million, although it is unclear how this amount will be impacted by trackers and compliance filings.<sup>1</sup> Alternative market prices in the first year would cost \$62 million, or roughly \$55 million less than the stated cost of the Hydros. The above-market prices embedded in NWE's Application and

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<sup>1</sup> See pp. 25-28, below.

projections persist for seven years, eventually accumulating to several hundred million dollars. It is only if NWE's carbon price assumptions do actually turn out to be accurate that the initial burden is reduced, with the estimated offset occurring about twenty years in the future, again assuming other assumptions, notably capital expenditure levels, hold true. This twenty year time frame could be viewed as the true projected "crossover" into net ratepayer benefits.

This proceeding is not about an abstract question of whether NWE should acquire PPLM's hydro facilities. Rather, it is about the price and conditions associated with such an acquisition that would provide value to ratepayers who are being asked to be financially responsible for the purchase. It is reasonable to fashion conditions that allocate to NWE some of the risks implicit in the assumptions that support its proposed \$900 million acquisition.

## **II. NWE's Hydros Valuation Incorporates Speculative Assumptions that Would Impose a High Degree of Risk on Ratepayers.**

A. Several components of NWE's DCF model are subject to significant uncertainty.

When asked how NWE determined a value for the Hydros, NWE witness Bird explained that the Company had developed a DCF analysis to take into account operating costs and revenues that a merchant power producer, as a competing bidder, might expect. NWE-11, 14:11-23. A net present value (NPV) calculation of the resulting stream of cash flows initially resulted in a value of \$826 million, although NWE decided to increase its bid to \$900 million in an

effort to foreclose any competitive bidders.<sup>2</sup> Several elements of this DCF analysis involve significant assumptions. Ratepayer benefits are deferred long into the future, and depend on the realization of these assumptions.

#### 1. Carbon costs

NWE estimated revenues for its DCF analysis by multiplying expected electricity production volumes by expected market prices. The market prices were based on actual Mid-C market quotes through 2020. NWE-7, 21:12-17. These quotes are available prices, not forecasts. Beyond 2020, NWE escalated the Mid-C prices at a 2.1% annual rate. These prices were further adjusted for expected transmission costs.

Beginning in 2021, NWE adjusted the market price markedly upward to represent assumed cost impacts from potential future regulation of carbon. NWE selected a scenario described in the Energy Information Administration's (EIA) 2013 Annual Energy Outlook for this adjustment. EIA itself, however, did not represent this scenario as a forecast or an expectation. MCC-1, 17:fn9. Carbon

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<sup>2</sup> NWE's assertion in its Brief, p. 21, that the "initial DCF value...was \$883 million ... not the \$826 million" is simply inconsistent with the record. At some point, Credit Suisse suggested modifications that resulted in an \$883 million value. The initial value, however, was \$826 million, and that was the estimated value NWE was working with at the time of the bid. In initial testimony filed with the Application, NWE witness Stimatz stated that the purpose of his testimony was to present the "DCF valuation analysis performed in support of NorthWestern's bid." NWE-7, 3:16-19 (emphasis added). His testimony describes the derivation of, and his exhibit displays, only the \$826 million value. This timing is confirmed in response to DR MCC-6, page 117, which shows a preliminary valuation of the Hydros being used on June 27, 2013, of \$826 million. This was four days before the July 1 bid of \$900 million. The \$900 million was toward the high end of the estimated range of \$790 – \$935 million provided in Mr. Stimatz's testimony. Nowhere in his testimony regarding support of NWE's bid does the number \$883 million appear. This value was developed at some later point in the process of justifying this bid.

prices were then assigned to peak and off-peak prices and escalated at a 5% annual rate. As MCC witness Dr. John Wilson noted, this carbon price adjustment to the market price forecast was extremely significant. It comprises \$247.4 million of the initially estimated \$826 million value. MCC-1, 12:8-10.

It is extremely speculative that carbon regulation will impose costs to such an extent. Indeed, NWE itself has opposed including carbon costs in its avoided cost calculations to support QF power prices, because it is not “incurring” such costs. MCC-1, 19:5-12. Dr. Wilson also testified that competitive power suppliers would not currently be able to pass along such assumed costs, so they would have to be willing to carry the risk of such a large carbon component themselves, or lower their bid to mitigate that risk. He explained that “(c)ompetitive markets, unburdened by such hypothetical taxes, would not permit such charges.” MCC-1, 32:7-16; 36:1-2. NWE Witness Stimatz agreed with this assessment. 7/9 TR, 181:6-11.

It is not reasonable to allocate all of this risk to ratepayers. Dr. Wilson noted that “it would be prudent regulatory policy to defer the inclusion of these uncertain future costs in current rates until (if and when) these costs are actually implemented.” MCC-1, 19:17-20. He therefore proposed possible conditions that would allow NWE to recover such carbon costs if, to the extent, and as they occur. One of these recommendations would allow NWE to initially collect revenues associated with the full purchase price, but treat revenues as customer contributed capital until the projected carbon costs are realized. A later suggested compromise

was to allow the same initial revenue collection, subject to refund if carbon costs are not implemented by some determined date. MCC-2, 6-7.

## 2. Capital Expenditures.

NWE's valuation also relies heavily on long-term projections of capital expenditures necessary to keep the Hydros in safe and reliable operating condition. The Company assumed that annual capital expenditures starting in 2018 will be \$8.5 million, escalated at 2.5%<sup>3</sup>. In contrast, PPL's own budgeted expenditures over the next five years average \$11.6 million per year. The average capital expenditures for the most recent 5 year period (2008-2012) were \$59.6 million per year. While this amount admittedly represents substantial rebuilding of the Rainbow facility and such an amount may not be anticipated at this time, it indicates the level of expenses that can occur over a long timeframe.<sup>4</sup> The fact is that "there is not even a single year in the last ten when the actual or budgeted capital expenditure total was as low as the \$8.5 million amount that NWE assumes (with 2.5% inflation) for all future years." MCC-1, 29-30.

Dr. Wilson provided several examples in his testimony of potential future repair and remediation needs that were acknowledged, but deemed too unknown

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<sup>3</sup> Capital expenditures which would lower the DCF result are escalated at 2.5% per year, while carbon cost assumptions that increase the DCF result are escalated at 5% per year.

<sup>4</sup> The cost of the Rainbow project was roughly \$210 million. See NWE-13, AM Exhibit 1, p. 13. It is unclear how much of this expense should be attributed to the 29 MW capacity upgrade (24 at Rainbow and 5 at Cochrane), as opposed to maintenance and continuation of the previously existing 36 MW. Using the \$3500/kw maximum value paid for hydro facilities in Mr. Masud's AM Exhibit 1, p.18, would imply an assignment of just over \$93 million to the new capacity, leaving \$117 million.

or speculative to estimate. For example, the “Black Eagle intake wall is leaking and may eventually need a buttress,” but this cost was “not included in the post 2017 capital estimate.” MCC-1, 31-32. There were also potential environmental costs that were not included because they were “less certain.” These are just examples. The Company’s independent engineer acknowledged that expenditures “significantly higher than \$8.5 million,” while not expected every year, are “possible in a given future year.” MCC-1, 33:3-4. NWE quotes, and takes comfort in, the Commission’s consultant, Mr. Szufnarowski’s, conclusion that he was “not convinced there’s enough information to say with certainty” that the projected capex budget “is adequate or inadequate.” NWE Brief, p. 14. However, this is a significant flaw in NWE’s Application as it has the burden of proof in showing that the budget is adequate and the value is thus not inflated.

### 3. Terminal Value

A large component of the cash flow valuation stems from NWE’s assumption that another competitive purchaser would receive \$1.073 billion dollars from a sale of the facilities at the end of the twenty year analysis period. This terminal value assumption accounts for \$270 million of the \$826 million NPV amount. MCC-1, 38:8. Dr. Wilson questioned the reliability of this assumption, given the age of the facilities and low assumed expenditures for repair and renovation. MCC-1, 13:8-12; 38:1-9. MCC Witness Clark also found it unusual that the Company would project the assets will increase in value and “is attempting to

charge current ratepayers for a depreciating asset while at the same time using the same assets at an appreciated value” in its DCF analysis. MCC-3, 15:1-15. Mr. Clark explained that this unusual situation creates an intergenerational equity issue, with current ratepayers paying too much for the future value. He suggested addressing this situation by reducing current rate base amounts by the NPV of the rate base remaining at the end of a fifty year depreciation period, and scaling back that amount over the same assumed depreciation period. MCC-3, 16:16-17:16. The magnitude of this terminal value assumption and the time period involved again introduces significant risk that is passed on solely to ratepayers in the form of the rate based purchase price derived from the calculation. An appreciated value is used in the calculation of the purchase price, but for purposes of determining the cost of service a depreciating value is assumed.

B. NWE’s comparables valuation analysis is flawed.

While the DCF analysis is the most direct method of valuing the potential value of the Hydros, NWE also has attempted to support its \$900 million bid price with reference to comparable transactions. The most relevant of these would pertain to transactions regarding hydro facilities.<sup>5</sup> Of the nine such assets identified by Mr. Masud, four were specifically identified by plant name, and the remaining five are portfolio assets that are not capable of direct comparison with

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<sup>5</sup> “Credit Suisse did not use comparable sales of other unregulated generation assets as hydroelectric generation assets possess unique operational and financial characteristics.” NWE-13, 8:8-10.

the Montana Hydros. NWE-13, AM Exhibit 1, p. 18; 7/11 TR, 126:10-25, 127:1-19.

The four individual hydro assets Credit Suisse used to develop its comparable transaction analysis are all significantly different than the Montana hydro assets. The Safe Harbor dam on the Susquehanna River serves a significantly different market in the PJM region, and half of its generation capacity comes from a new build finished in the late 1980s. 7/11 TR, 114:4-13. Witness Masud agreed that the Safe Harbor dam has multiple revenue streams, ancillary services and renewable energy credits that distinguish it significantly from the Montana Hydros. 7/11 TR, 115:7-13. The second individual comparison consists of a series of four dams on the Cheoah River in Tennessee, the last of which was built in 1957. Those dams produce a total of 3789 MW of electricity, and the transaction price used by Credit Suisse to compare the asset included 86 miles of transmission lines and approximately 22 square miles of land, or 14,400 acres. 7/11 TR, 118:2-119:11. The third individual hydro acquisition Mr. Masud included in his analysis was the Magpie resource in Quebec, Canada, which was built in 2007 and is a new facility. 7/11 TR 120:1-18; NWE-13, AM Exhibit 1, p. 18. The Magpie transaction involved a \$28 million purchase which included assumption of \$55 million of debt for 40.66 MW of capacity, resulting in a purchase price of \$2,069 per kW for a new Hydro facility. 7/11 TR, 121:1-25, The Magpie facility is distinct from the Montana hydros in that it is brand new in its entirety, in contrast to the Montana dams the majority of which were built nearly a century ago. The

final specifically identified hydro asset is a dam in Quebec, the Manicouagan hydro asset. Credit Suisse in its analysis listed the price of the transaction in U.S. Dollars, but included the Canadian Dollar purchase price for the transaction. The appropriate U.S. Dollar purchase price for that asset was \$484 million, not the \$603 million as set out by Credit Suisse. 7/11 TR, 124:14-24, 125:1-6; NWE-19, Ex. AO-02, p. 41.

The DCF model remains the best and most appropriate method of valuing the Hydros.

### **III. NWE's Stochastic Modeling Of Comparative Resources Is Biased In Favor of the Hydros.**

NWE also performed a stochastic, or risk-adjusted, comparison of several resource alternatives. Statutes and Commission rules require NWE to consider risk in its resource planning. Dr. Wilson agreed that there is merit to stochastic modeling, but concluded that NWE's results are unreasonably biased in favor of the Hydros. They are biased because they incorporate substantial risks for the alternative of market purchases, but exclude risks for the Company's assumed low Hydros capital expenditure levels. MCC-1, 28:10-29:11.

As noted above, these same reduced capital expenditure assumptions formed part of the basis for NWE's DCF analyses, and the earlier discussion in that connection also applies here. Both general and specific possibilities that these expenditures could be greater are discussed in Dr. Wilson's testimony and in great detail in the Essex Partnership's checklist described by Mr. Szufnarowski. PSC-1.

These uncertainties, which are also detailed in NWE's own independent engineer's report and cited by Dr. Wilson, create risks.

NWE retained an additional engineering consultant, Mr. Rick Miller, to support its earlier capital expenditure assumptions. By the late date Mr. Miller was brought in, however, he was not even performing "confirmatory" due diligence, but was advocating in support of a filed application. Moreover, Mr. Miller explained that he does not consider "contingency dollars" in the absence of a "defined reason," although he might "identify certain elements as a risk," and "different clients treat that risk differently in their pro formas." TR 7/16, 206:17-24. Contingencies are risks. Mr. Miller does not personally count risks that are not quantifiable, however, and NWE chose to follow that same course here, even though it was attempting to perform a risk-adjusted analysis. While Mr. Miller's alternative capex estimate is thus unhelpful, it is certainly worth noting that he acknowledged implied cost risks related to future relicensing requirements when he explained that license modifications are routinely avoided and rarely occur "because of the risks and the – that occurs with the re-opening." TR 7/16, 214:1-5. Should some of these "uncertainties" materialize, consumers would be asked to pay "contingency dollars" with real money when they have already been asked to pay a purchase price for the Hydros predicated on zero "contingency dollars."

NWE did attempt to quantify other risks that could affect non-Hydros options, regardless of how uncertain they might be, however. In the "current" market scenario, for example, NWE added \$451 million to costs to account for "price

uncertainty.” NWE-1, 38:1-8. Significant amounts were added to other non-Hydros scenarios to account for fuel price risk, or the potential, but unknown, fluctuations in fuel price. Dr. Wilson graphically demonstrated that, without the large market price risk added to the non-Hydros option and the terminal value credit for the Hydros option, the current, or market, option has a cost advantage over the Hydros. MCC-2, 9-10. While acknowledging that there are market price risks, he explained that the Company’s stochastic comparisons unreasonably excluded risks associated with the Hydros. The comparison is further flawed because market price risk has declined recently and market prices are expected to remain less volatile. MCC-2, 11:18-12:16.

#### **IV . The Commission Should Impose Conditions On the Hydros Purchase That Would Increase the Likelihood Of Ratepayer Benefits.**

NWE acknowledges that the large and immediate rate increase that would result from the proposed acquisition could be avoided by pursuing the “current” market-based scenario. In fact, this above-market scenario will continue through 2020, by which point ratepayers will have paid nearly \$400 million in excess charges. MCC-1, 39:1-23. NWE argues this large early detriment is reasonable, because, with the imposition of assumed carbon costs, future ratepayers can expect a turnaround with respect to the market, and the excess payments will be returned over the next thirteen years. The fundamental problem with this arrangement is

that the upfront costs are nearly certain,<sup>6</sup> while the benefits depend entirely upon the significant assumptions described above relating to carbon cost imposition, capital expenditure requirements and terminal value. These values are both highly speculative and out of line with experience.

Dr. Wilson has proposed several conditions for approval that would avoid imposing all of these risks on ratepayers, and increase the chance that they will benefit from the proposed acquisition. With respect to capital expenditure uncertainties, Dr. Wilson initially suggested that the Company forego any recovery of or return on expenditures exceeding an annual average of \$10 million, escalated at 2.5%. This provision is reasonable in light of NWE's assurances that such expenditures will not exceed \$8.5 million, escalated at 2.5%. MCC-1, 47:14-21. Indeed, to the extent expenditures exceed this level, ratepayers would be asked to effectively pay twice for them – once indirectly in the Hydros rate base value derived from the low capex projections, and then again in the actual expenditures.

In Additional Issues testimony, NWE analyzed the value impact of a 15% decrease or a 30% increase in capex levels, arguing that even these are extreme scenarios, outside of which no modeling is even necessary. In response, Dr. Wilson proposed an alternative treatment whereby a range would be established around the \$8.5 million level, from 15% below (\$7.225 million), to 30% above (\$11.05 million), with amounts over the upper limit disallowed, but NWE being

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<sup>6</sup> The first seven year market comparisons are based on price quotes, not forecasts.

allowed to retain savings below the lower limit. MCC-2, 3:10-4:8. This would provide cost protection for ratepayers and inducements to NWE to control capex expenditures.

NWE is adamant that its projections are correct and, if so, this condition should have a positive effect for the Company and should not be objectionable. NWE alone was in a position to value and bid on the assets based upon its assumptions. The ratepayers of Montana are being asked to pay the bid price which is a function of the Company's assumptions, although they had no role or say in making those assumptions. It is reasonable and just to ask the Company to bear the risk of its own assumptions which resulted in the valuation and will result in a safe return to the Company's investors.

With regard to carbon adders that increased assumed market prices beginning in 2021, Dr. Wilson initially suggested that there be no recovery of hypothetical amounts until CO2 costs are actually implemented. MCC-1, 48:1-9. He proposed that the present value of these assumed amounts be removed from rate base, treated as a deferral, and added back to rate base, with carrying costs, if and when actually implemented. In Additional Issue Response testimony, he suggested alternative compromise treatments. The first would be to allow NWE to receive the full amount of carbon related revenues, but treat them as customer-contributed (zero cost) capital until actual carbon related costs are incurred. This treatment is similar to that for deferred taxes. A second option would be to simply allow

collection of the carbon-related revenues, subject to refund if carbon costs are not implemented within a specified timeframe. MCC-2, 6:14-7:7.

Finally, NWE should not be allowed to collect net negative salvage for these plants in the future. The Company has assumed zero decommissioning costs as the result of a large terminal value, and that assumption has formed part of the basis for the purchase price that will be included in rate base. MCC-1, 47:4-13. Ratepayers should not pay twice, whether directly or indirectly.

**IV. The Commission Should Set the Allowed Return on Equity and Capital Structure at Levels that Reflect the Low Risk Nature of the Transaction.**

Two significant concepts inform the Commission's determination of the appropriate return on equity and capital structure in the event NWE's Application is approved.

First, the Company does not have an across-the-board ROE that applies to all of its assets. The return on equity and capital structure set in this docket will apply only to the portion of the Company's assets that are at issue here. In other words, approximately two-thirds of the Company's rate base will be outside the return on equity and capital structure set by the Commission in this proceeding. This is important because, by way of example, if the Commission sets the ROE in this docket at 9%, the Company's ROE for its remaining assets will pull that number upward, resulting in a Company-wide ROE significantly higher than 9%. The ROE set in this proceeding will be diluted as viewed Company wide, which is

how investors view any Company. Using a DCF methodology long accepted by this Commission, Dr. Wilson demonstrated that an equity return in the 8-9% range would be reasonable for NWE as a company. Considering the ROE in place for a number of other components of the Company's asset base then, an ROE in the range of 8 to 9% for this discrete component is all the more reasonable and appropriate.

Second, but as important, is the fact that preapproval shifts risk away from the shareholders and investors to the ratepayers. The Commission has long recognized this reality, and rejected preapproval requests for that very reason. *Montana Power Company, Docket No. 88.6.15, Order No. 5360d, ¶ 307, cited in Montana Power Company, Docket No. D2001.10.144, Order No. 6382d, p. 12* (“Extensive preapproval undoubtedly shifts risks from shareholders to ratepayers.”)<sup>7</sup> For equitable treatment of ratepayers who by virtue of preapproval are made to be the insurers of this transaction for NWE, this shifting of risk should be acknowledged in the ROE that is established.

Focusing on risk allocation as proposed by the Company in this acquisition, the appropriate return on equity for this component of rate base is in the 8% to 9% range and the appropriate capital structure would be 45% equity and 55% debt.

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<sup>7</sup> “In utility ratemaking, the concept of preapproval is generally the outgrowth of a desire to reduce the risk associated with a certain action. Extensive preapproval undoubtedly shifts risks from shareholders to ratepayers. \*\*\* Preapproval places the Commission in the position of actually protecting management from imprudent actions, thus seriously compromising management independence, and the arm's length relationship between the management and the Commission.”

A. The DCF Results and Circumstances of this case support a Return on Equity no greater than 9%.

Investments generally yield high returns on high risk endeavors and lower returns on low risk endeavors. Preapproval allows the Company's investors to decrease the risk taken in an investment, knowing that the ratepayers of Montana will be the source of funds for the acquisition and that the purchase price will be recouped whether or not the assumptions underlying the transaction price are accurate.

A low-risk investment doesn't warrant or require the same rate of return that a higher-risk investment would warrant. Fitch Ratings assessed the Company as having a "low risk credit profile with all cash flows derived from regulated assets." 7/11 TR, 136:3-10; NWE-11, Exh. BBB-7, p. 2. Mr. Bird testified that "one of the advantages of being a fully regulated utility is that our utility is deemed to be a low-risk utility." 7/11 TR, 136:11-13; NWE-11, Exh. BBB-7, p. 2.

The Company's financial advisor throughout this transaction, Credit Suisse, developed its analysis of the Hydro acquisition as a [REDACTED]

[REDACTED]  
[REDACTED] 7/10 TR, 5:15-19; NW Response to Data Request MCC-006, p. 160 [CONFIDENTIAL]. Mr. Bird Agreed [REDACTED]

[REDACTED]  
[REDACTED] 7/10 TR, 15:14-22  
[CONFIDENTIAL].

In developing the 10% ROE requested here, the Company used a combination group of 24 comparable companies and estimated the cost of equity for those companies. In reaching its outcome of 10%, the Company arbitrarily excluded the lowest one-third of the values used to estimate the cost of equity for the 24 companies. 7/10 TR, 123:20 – 124:12. Mr. Bird attempted to justify the exclusion of so many values based on them being lower than the corporate bond rates, but in fact, only five or six of the values used to estimate cost of equity for the 24 companies were below corporate bond rates. The Company's exclusion of data involved only the lowest values, and not an across-the-board, reasoned approach. For example, three values of 7% were excluded for Black Hills Corporation while an obvious and aberrantly high value of 14.5% was included for that same company. NWE Response to DR PSC-7b, Att. NWE Exh. 4, p. 3 Excel Line 13, Company 5, columns D, F, H and J.

Using the Company's own cost of equity estimates, Dr. Wilson calculated an ROE in two ways: first, by using all values set out by the Company in its estimate, and second, by using the Company's values but excluding the 2 highest and 11 lowest values. There was no question regarding the appropriate sample group; the only difference in Dr. Wilson's calculations and the Company's was the exclusion by the Company of one-third of the low-end values which will have no impact other than to result in an unreasonably high ROE. Dr. Wilson offers two alternatives: exclusion of outliers on the high and low end (2 on the high end and 11 on the low end); or inclusion of all numbers. Using either of these approaches,

an ROE of 8-9% is the result. In both calculations, Dr. Wilson determined the appropriate ROE for the Company, based on the Company's own data set, to be in the range of 8 to 9%. NWE Response to DR PSC-7b, Att. NWE Exh.4, p.3; 7/10 TR, 127:14-21; 131:5-19.

Dr. Wilson calculated the ROE for the Company based on its own estimates by using all of the included values and by excluding the two highest values and the eleven lowest values, which were the values below 6%. MCC-1, Exh. 5 p. 3; 7/10 TR, 128:17 – 129:12.

Excluding the values below 6%, given the Company's proposed cost of debt of 4.5%, excludes all values less than 150 basis points above the Company's cost of debt. 7/10 TR, 130:1-9 With the Company's revision to the cost of debt to 4.0% at the hearing, this excludes all values less than 200 basis points above the Company's cost of debt. Using this approach, the appropriate ROE for the Company is in the 8 to 9% range. MCC-1, Exh. JW-5, p. 3; 7/10 TR, 130:10-13.

In fact, the only way to reach the Company's suggested ROE of 10% is to cherry pick the data to such an extreme that exclusion of one-third of the estimated values is required, all on the low end, to support the Company's request. Such an approach lacks analytical integrity, and leads to a pre-determined outcome and inaccurate results.

Lacking support from an accepted DCF analysis, Company witness Adrian McKenzie testified that the end result of the process is more important than the particular method used. 7/17 TR, 27:17-20. The implication of this logic is that

one knows the answer to the ROE question in advance, so the reasonableness of the analytical methodology is unimportant. Applying that logic, however, the end result here is that the purchase price of the Hydros will be fully recouped from the Company's captive Montana ratepayers, with the Company's investors facing little to no risk. An ROE of 10.0% is too high given the favorable risk profile of the Hydro acquisition to the Company's stockholders and the unfavorable burden placed on Montana ratepayers who have no options to reduce the cost of their electricity supply.

The Commission has broad discretion to set allowed returns on equity. In exercising this discretion, the Commission should be cognizant of the large rate increases that preapproval here would impose upon Montana ratepayers who, even under the Company's own assumptions, will not benefit for quite a long time, and certainly not before the next opportunity to set NWE's rates. The risk that the currently increased payments from Montanans may not actually result in future net benefits, and that the consumers who are paying for presumed benefits at some point in the future may not realize those benefits, warrants a lower return on equity than would be allowed for a risky investment. Recovery of costs related to the Hydros as they have been transferred several times has not been a risky proposition, but actually receiving the benefits from paying those costs is presenting risks for the ratepayers of Montana.

One of the fundamental principles of utility ratemaking is determining an appropriate level of capital costs necessary for the utility to secure the capital

required to finance its operations. See *Mountain States Telephone & Telegraph Co. v. Department of Public Service Regulation* (Mont. 1981), 191 Mont. 331, 334, 624 P.2d 481. The cost of capital involves interest on debt (borrowed capital) but also the cost of attracting purchasers of its common stock (equity capital). *Id.* As the Montana Supreme Court noted, the Commission must set rates “sufficient to cover the utility’s cost of debt and cost of equity, but no more, or the utility’s customers will be paying excessive rates for the services the utility provides.” *Id.*

An appropriate return on NWE’s invested equity is in the 8 to 9% range.

B. A Reasonable capital structure for this proposed preapproved acquisition would contain no more than 45% equity.

NWE has based its requested revenue requirement on a capital structure containing 48% equity and 52% debt. Dr. Wilson recommends a capital structure containing no more than 45% equity for this component of rate base. The difference between these two financing structures is important, accounting for several million dollars in potential savings to ratepayers.

A lower cost equity ratio of 45% is reasonable, and is in the range contemplated at the time of NWE’s filing. The Application, at page 30, indicates that NWE was itself considering “permanently financing the purchase price” by issuing a range of “\$450-500 million of secured debt securities,” and “up to \$400 million of equity securities.” The top end of that debt range would result in a debt component close to 55%. This was an active consideration, not something rejected by NWE. Indeed, the entire Company’s debt ratio as of September 2013 was

53.5%. PPL's was 65.5%. NWE-13, AM Exhibit 1, p. 6. A 55% debt ratio does not exceed the Company's attainable debt ratio ceiling, as NWE itself acknowledges. While a 52% debt component would keep the ratio within NWE's preferred range, so would a 55% debt component. See NWE Response to DR MCC-6, p. 140 and application, p.30. It must also be remembered that the financing for the Hydros will affect only one component of NWE's rate base. Based on the current 53.5% ratio, 55% debt for the Hydros would bring that number to the range of 54%. In proposing to finance these preapproved additions with 52% debt, NWE is actually seeking to adjust its overall debt ratio downward from 53.5%. This is inappropriate, especially in this context. NWE Witness Bird acknowledged that this particular transaction is viewed as positive by ratings agencies, and "(i)t might allow us to carry a bit more leverage." 7/11 TR, 32:2-3. Given the low risk of this very large preapproval, the Company's own debt target range, and the upfront risks the ratepayers are being asked to bear, a 55% debt ratio to moderate those upfront costs is more than reasonable, it is a necessary moderation of consumer risk.

**V. The Goal Of Rate Stability Must Be Assessed In Relation To Absolute Cost Levels In Setting Just and Reasonable Rates.**

To counter concerns about large and immediate rate increases, NWE has throughout this proceeding emphasized the value of rate stability. The Company frequently displayed a graph showing a 113% increase in the commodity cost

component of electric bills between 2002 and 2008.<sup>8</sup> NWE-3, 8; NWE Brief, p. 26. This truncated display is misleading. 2002 was the real beginning of generation deregulation in Montana, as there had been a buy-back period at historic rates for several years as part of the plant sale to PPL. The immediately ensuing price increases beginning in 2002 coincided with the movement away from original cost assets to a market-based environment beset with a historically unique regional transition to electricity markets and the well-known market manipulation that was occurring during that transition. NWE's arguments based on this highly unusual period are misplaced and unconvincing. It must be remembered that the price NWE is now proposing to embed in rates is based on the very market about which it seeks to generate these concerns. The Hydros are not proposed to be included in rates at original cost, but based on a projected, and upwardly adjusted, market revenue stream. Moreover, there is no reason to believe that those historically unique conditions from 2002 to 2008 associated with a shift in regulatory paradigms and inadequate market monitoring will be repeated. More recent history and NWE's own market projections bear this out. Dr. Wilson provided an extended and more complete version of NWE's graph. It shows that, following the arbitrary 2008 cutoff date that NWE chose to use, electricity prices have fallen dramatically, have remained in the \$25-35/MWh

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<sup>8</sup> The high cost end of this period was the market timeframe NWE used to support its rate basing of Colstrip Unit 4.

range for the last five years, and are also stable through 2020 based on currently available forward market price quotes. MCC-2, 13:1-8.

NWE seeks to counter this current and anticipated long-term stability in electricity markets by a limited reference to several days in December of 2013 when prices spiked to the \$80/MWh range. NWE-3, 22. Daily fluctuations do occur. The fact is, however, that this increase was very short term and the annual average price for 2013 remained below \$40/MWh. TR 7/8, 58:17-22. The annual average is what should be of most concern. NWE's customers do not pay rates on a daily price basis. Commodity trackers are adjusted on a monthly basis, but even then a rolling average is used to smooth out price changes. Customers who want to further smooth out these tracker changes can choose the option of budget billing. The December, 2013, volatility represents a short-term spike. NWE acknowledged that budget billing is effective in addressing such short-term spikes. TR 7/8, 61:1. Finally, if the Commission is nevertheless concerned about any remaining issues of volatility, it could terminate the monthly tracker process and return to biannual or annual trackers. Ironically, monthly trackers were specifically intended to help send price signals in a deregulated commodity environment. There is no statutory requirement for monthly tracker adjustments, however. § 69-8-210, MCA. This is a matter currently within the Commission's control.

NWE has assumed that the Hydros' cost will remain stable. Of course, there is no guarantee this will be the case as described above in relation to capex

contingencies, and this has apparently not been the case with respect to another owned resource, Colstrip Unit 4. Accepting this assumption, however, it is difficult to agree that stable costs in the \$60/MWh range are a reasonable trade-off for costs that may fluctuate but stay in a range below that level and produce average costs well below \$60/MWh. Reflecting this reality, several public witnesses from Great Falls who actually purchase their power in the market appeared and testified that they were anxious to continue this arrangement, and didn't want anything in this proceeding to change their ability to choose a market-based supplier.

**VII. NWE's requested annual revenue requirement for the Hydros is uncertain and unreasonable.**

NWE originally requested a Hydros annual revenue requirement of \$128,402,190. NWE-31, 4:15. It modified this request in rebuttal testimony to \$120,963,690. NWE-32, 4:4. The reduction resulted from two adjustments. The first was changing book depreciation from 40 to 50 years as recommended by Mr. Clark. This caused a reduction of \$4,401,890. The second was removing \$30 million related to Kerr from rate base. The resulting reduction was \$3,036,610. On the second to last day of the nine day hearing, NWE made further modifications to its request, resulting in a stated revenue requirement of \$117,149,257. NWE-33. This most recent reduction was the result of two additional adjustments. The first of these live testimony changes is a reduction in

assumed debt cost from 4.5% to 4.0%. The second is use of actual PPL property tax expense. Both of these latter changes are unreliable.

To be clear, NWE is not proposing to fix its debt cost at 4%, regardless of actual cost. It is proposing to incorporate actual debt cost, whatever that is, in its compliance filings. It can attempt to drive the percentage cost lower by relying on a heavier mix of short term debt, but Commission questions indicated a disinclination to pursue this strategy. MCC witness Clark assumed that the actual debt cost would be used, as NWE is still proposing, and accepted NWE's representation of 4.5%, knowing that would be adjusted in compliance filings if necessary. Alternatively, he could have plugged in a different number, such as 4%, and that would have lowered his revenue requirement calculation. In the end, the result would be the same, and would be based on actual cost.

The proposed property tax adjustment has similarly little, if any, permanent effect. In its initial filing, NWE estimated that its property tax obligation related to the Hydros would be \$14,050,317. It has not changed this estimate and, in fact, does not control the ultimate assessment. Plugging in PPL's current property tax amount of \$12,386,568 does not establish that as the cost level for NWE. What will happen, then, is that NWE will eventually seek recovery of the differential in its annual property tax tracker. In response to questions about this reality, NWE has contended that it is allowed to recover only 60% of the \$1,663,749 difference, so there would be a one-time net ratepayer benefit of \$665,500. The reason for this 40% disallowance in the tracker is to account for income tax effects of the

increased property tax expense that is now being tracked. This is not a ratepayer net benefit. What is important to note in this regard is that NWE appears to have already accounted for the income tax effect by increasing its pro forma income tax expense as a result of the assumed property tax reduction. This reduction results in a lower income tax deduction and therefore higher income tax expense. In other words, it would recover the income tax differential up front in the \$117,149,257.<sup>9</sup> Again, Mr. Clark could easily have substituted a different property tax number to derive a lower initial revenue requirement. Given the property tax tracker, however, there is no practical reason to do this. The actual expense will eventually be flowed through to ratepayers.

Mr. Clark initially calculated a maximum first year revenue requirement of \$114,597,373, not taking into account the suggested modifications for carbon cost assumptions described above. This number is not comparable to NWE's newly proposed \$117,149,257 revenue requirement. If Mr. Clark were to view the debt cost and property tax changes as appropriate corrections, his recommended revenue requirement would be substantially reduced, in line with NWE's

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<sup>9</sup> In NWE-33, pg. 4/4, line 16, NWE reduces the property tax amount and hence the overall total property and other taxes amount by \$1,663,749. This reduced total property & other taxes amount of \$13,319,585 then flows through to page 2/4, line 5, of the exhibit which shows the income tax computation. The income tax flows through to line 32 on page 1/4 as part of the total revenue requirement calculation. The deduction of property and other taxes against income is therefore also lower by \$1,663,749 and raises taxable income by a like amount. The argument for a benefit being associated with the property tax deduction is that even with the tax tracker NWE will only recover 60% of the reduction to property taxes. Therefore, consumers are asserted to get 40%, which amounts to \$665,500. On the other hand, NWE's taxable income has increased by \$1,663,749. NWE's combined state and federal income tax rate is 39.3875%. Applying that percentage to \$1,663,749 results in \$655,309. Now consumers are paying more in rates for income tax but less for property taxes by essentially the same amount.

reductions. Additionally, the \$30,000,000 Kerr rate base reduction made in NWE's rebuttal filing would show up to a much larger extent in Mr. Clark's recommendation to remove the Kerr acquisition adjustment after Kerr is no longer serving NWE's ratepayers. This was not reflected in the first year revenue requirement, making Mr. Clark's revenue requirement further not comparable to NWE's Exhibit 33.

In the fairly near future, it does not appear to make much difference what property tax expense and debt cost the Commission might choose to use in any compliance filing. Reasonable rates in these circumstances, however, would require that the Commission authorize no more than a 9% ROE on this portion of NWE's rate base, and allow a capital structure for the Hydros that contains 45% equity.

NWE also proposed a capital expense recovery limitation in its live testimony. It would cap these expenditures at its projected \$58.1 million for the first six years, allowing a return of, but not a return on, excess amounts. The Company would reserve the right to request recovery of additional expenditures it deems extraordinary. The limitations and stated exceptions make the efficacy of this proposal questionable. More importantly, it does not address the fundamental capital expenditure concern; that is, ratepayers would still be asked to pay the rate base value built upon lower expectations while also returning excess amounts to the Company, and this problem is most likely to arise in later years, not the first six.

In its Initial Post-Hearing Brief (p.26), NWE characterizes the increase in rates that would result from the Hydros as “small.” In NWE-33, provided at the hearing, NWE displays a “typical residential” bill analysis showing a 5.63% bill increase that would be related to the Hydros. This is the same analysis that Mr. Clark provided in calculating a rate increase of 8.9% for the Hydros compared to projected rates for July 1, 2014. One important reason that this calculation has changed is that rates are somewhat greater than in the initial calculation. Ironically, this temporarily imposed increase is related to deferred costs from the interim increase in the electric tracker which are significantly caused by increased costs related to the outage at Colstrip 4. Colstrip 4 is of course a Company owned resource which supposedly should provide rate stability. In fact, increasing costs related to the Hydros would be significant and exacerbate this increasing rate pressure. Moreover, the increase bills related to in the Hydros cannot be minimized and deemed “small,” simply because one chooses to look at it in isolation. The Commission must remember that there are many residential customers who are not “typical,” and there are many commercial and larger business customers who will also be impacted. With respect to the typical residential customer, NWE-33 indicates a 10% increase in the commodity portion of the bill. The Commission is well aware that other portions of the bill are subject to imminent and significant increases, and it would be short-sighted and wrong to look only at one line item when considering ratepayer impacts. The

effect of a Hydros related rate increase must be put in proper context and should not be trivialized.

### **VIII. Conclusion**

It has been argued that paying more upfront to realize long term benefits makes sense. This is true only if the long term benefits are realized. NWE's request comes at an enormous upfront cost. NWE is projecting a crossover in 2021, but while the upfront costs are well known, the benefits after 2021 are based on the assumptions described above. These assumptions have to be borne out and hold long after 2021 to offset the initial costs. There are ways to protect Montana consumers and to ensure that the power produced from the hydro facilities benefit them at just and reasonable rates. The Commission should condition the proposed rate basing on the provisions described above. The Commission should also take into account the circumstances of preapproval and the significant rate increase that would be imposed as a result of the upfront costs involved in this proposal and authorize an ROE not exceeding 9% on a capital structure with no more than 45% equity.

Respectfully submitted August 15, 2014.

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