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

IN THE MATTER OF the Application of NorthWestern Energy for Hydro Assets Purchase	)))	REGULATORY DIVISION DOCKET NO. D2013.12.85

HUMAN RESOURCE COUNCIL, DISTRICT XI, AND NATURAL RESOURCES DEFENSE COUNCIL POST-HEARING BRIEF

INTRODUCTION

Human Resource Council, District XI (HRC) and the Natural Resources Defense Council (NRDC) support the application of NorthWestern Energy (NWE) in the above captioned docket. HRC and NRDC urge the Commission to remember the old adage "not see the forest for the trees." In this proceeding, due to the proposal's importance, the extent of analysis that NWE performed, the voluminous record and, not to be overlooked, the nature of the arguments in opposition, there is the possibility that the big picture will be obscured in a fog of details and evidence.

What is important is that by 2016 NWE will, if nothing is done, have to go into the market for nearly 50% of its supply needs, Recognizing that doing nothing was not an option, NWE entered into an agreement to purchase PPL Montana's (PPLM) hydroelectric assets for $900 million (effectively $870 million once Kerr transfers). The purchase price was the product of a negotiation between NWE and PPLM. It was informed by, among other things, two discounted cash flow (DCF) analyses, a comparable sales analysis, and the fact that PPLM had rejected an earlier offer by NWE to purchase the hydroelectric facilities for $740 million. Comparing the performance of the hydroelectric assets as a part of NWE's portfolio with alternative sources of supply, including a market only alternative, a natural gas combined cycle combustion turbine (CCCT) alternative, and a CCCT plus wind alternative, revealed that the portfolio that included the hydroelectric assets significantly (by hundreds of millions of dollars) outperformed the alternatives on a risk adjusted basis. Hydroelectric facilities are not subject to a fuel cost risk; relatedly their power production will not incur a carbon penalty no matter what happens with carbon regulation. Finally, and most importantly the economics of the assets are more than reasonable with the cost to customers projected to be a little less than $60 MWh, at around $1500 per kw.

In a moment of clarity during the hearing, NWE's Manager of Asset of Optimatization, Joe Stimatz perfectly framed the issue. He stated:

> The great thing about this acquisition, to me, is that you're really trading all of that uncertainty [associated with reliance on the market] for a great deal of certainty for what those costs will be. And so we can delve into all of the details about this carbon forecast, or that carbon forecast, or how it affects market prices, or whether there will be new technologies, and all of those things are important to talk about and think about, but what we are really doing here is saying, for this quantity of output over a long period, we think it's a good deal for our customers to pay about $59 or $60 per MWh over that term. That certainly is worth it.

Hearing Transcript, July 9, Day 2 at p. 228, lines 14-25.

Accordingly, HRC and NRDC recommend that the Commission approve NWE's proposal as filed and as modified in the utility's rebuttal testimony and during the hearing.[1] In order to assist the Commission, and being faithful to the observations just

[1] HRC and NRDC did not file testimony or offer an opinion on NWE's proposal for a 10% return on equity (ROE). Testimony at the hearing highlighted the fact that prior Commission orders have allowed NWE an ROE of at least 10%. *See* Bird, Hearing Transcript, July 10, Day 3 at p. 195, lines 3-5, p. 214-216, lines __-__. Not having heard a persuasive reason why NWE should not be allowed a similar ROE, HRC and

made, this brief will not immerse itself in the weeds of this case but instead will address a few subjects, at a relatively high level, that are either of importance or in need of clarification.

1. <u>The Unbalanced Nature of NWE's Supply Portfolio</u>

By 2016, NWE will have to go to the market for nearly 50% of its portfolio needs. NWE-7, Stimatz Direct Testimony at p. 33. No reasonable person would think this an acceptable situation. It was only at the beginning of the last decade that the western U.S. experienced exploding energy prices and concomitant severe economic impacts. Power, Hearing Transcript, Day 8 at p. 171, lines 2-10. It was only a few short years ago that the housing market and financial services industry collapsed causing an economic downturn the likes of which the county hadn't seen in 80 years.

Energy, of course, is critically important to human welfare and the economy. Thus, it is necessary that utilities avoid being being put a position where they are forced to resort to the volatile spot or short or even intermediate-term electricity market for a substantial share of their load. Not surprisingly then, an important objective of the Commission, perhaps the most important objective, is to ensure that the cost of energy to consumers is affordable and stable over the long term. *See* ARM 38.5.8203(1)(a), (the Commission's goal is "to facilitate a utility's provision of adequate and reliable electricity supply services, stably and reasonably priced, at the lowest long-term total cost.")

NRDC support NWE in this regard. At the hearing, counsel for Consumer Counsel apparently took the position that Commission orders that adopted stipulations containing an agreement on ROE could not be used to indicate that an ROE was appropriate because of a provision in the stipulation barring its use as a "precedent." *See* Bird, Hearing Transcript, July 11, Day 4 at pp. 79-85, lines 13-6. However, while this provision can reasonably be used to insulate the signatories to the stipulation from any of the terms contained therein, it cannot so insulate the Commission. When the Commission adopts a stipulation it necessarily finds that the stipulation is in the public interest. In other words, when the Commission adopts a stipulation it makes that stipulation its own.

Undue exposure to the market is not a new issue for utilities. Nor is it a new issue for NWE. Dr. Dorris testified:

> I'd say over the last 15 years they've been frankly exceptionally lucky. But to proceed forward on a basis where one remains subject to the vagaries of the market, whether it's the spot or the forward market, that's typically considered problematic.

Hearing Transcript, July 8, Day 1 at p. 223, lines 20-25. "Usually regulated utilities [address] this by owning a substantial part of the generating capacity needed to serve their customers loads."[2] HRC/NRDC Response to PSC-358(c). Another solution, as noted by the just quoted data response, is to enter into intermediate length contracts. But, that raises the "cliff" issue, which NWE has had to face a couple of times in the last decade or so and which runs the risk (even likelihood) that market conditions will be very different at the end of the contract than when it was entered into.

In addition to the inherent risk associated with such a high degree of market exposure, the risk is compounded by the fact that it is possible that the stage is set for a convergence of factors that, toward the decade and beyond, will lead to an increasing regional electricity prices.[3] These include: closure of some of the region's coal-fired generators, new environmental regulations imposed on thermal generation, including under EPA's 111(d) rule, the fact that balancing services have not kept up with additional wind power capacity, and what analysts are predicting to be an emerging regional

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[2] *See also*, Dorris, Hearing Transcript, Day 2 at p. 95, lines 13-25, using the example of Nevada Power, which, a decade and one-half ago, was in a 50% short position and which in 6 months during the 2000 energy crisis had over $1 billion in power purchase costs, and "since then Nevada Power has learned its lesson and has sought to have a more balanced resource supply where they have physical assets meeting their expected needs of energy." Similarly, Dr. Power testified: "I think it's that sort of shock that utilities have traditionally worried about and was one of the reasons they tried to – one of the reasons they made fixed investments so at least part of the cost of electricity was going to be fixed." Hearing Transcript, Day 8 at p. 171, lines 17-22.

[3] Here, then, a demonstration of why it would be ill-advised for NWE to play the wait and see game and enter into intermediate length contracts that would expire right around the time when the market may very well have significantly tightened.

capacity deficit. *See*, NWE-1, Hines Direct Testimony at p.14, Hines Hearing Transcript, July 8, Day 1 at p. 200-202, lines 10-5, NWE-7, Stimatz Direct Testimony at p. 29-30, Power, Hearing Transcript, July 17, Day 8 at 91-92, lines 16-17.

For its part NWE has made it clear that the situation could not go unaddressed. NWE Witness Hines stated, "doing nothing is not an option." Hearing Transcript, Day 1 at p. 78, lines 20-21.[4] NWE witness Stimatz testified that, "NWE does not view reliance solely on the wholesale market to meet unfilled customer needs as a viable alternative." NWE-10, Stimatz Rebuttal Testimony at p. 12. If the hydroelectric opportunity had not presented itself there is little doubt that NWE would have sought to build or acquire the output of a natural gas facility. *See* NWE-1, Hines Direct Testimony at p. 8, Power, Hearing Transcript, Day 8 at p. 181, lines 18-23. But, assuming relative stability in market prices for the next few years, there is no reason to think that were NWE to bring such a proposal to the Commission it would not be objected to on the same grounds as the instant proposal, namely that it is out of line with what the market is doing.[5] *See* NWE-3, Hines Rebuttal Testimony at p. 7.

2. <u>The $900 Million Price Tag</u>

As testified to by NWE witness, Brian Bird, and reiterated by HRC/NRDC witness, Dr. Power, NWE used a wide array of financial information to determine the amount to bid on the hydroelectric assets. NWE-11, Bird Direct Testimony at pp. 16-21,

[4] Hines also testified: "We can't wait ten years where hopefully a widget will appear. We need to go out and acquire generation very soon. Between now and 2020 – 2016 and 2020, like I said, we're over 405 MW short on average heavy load. And, I think it's around 235 MW short low [probably should be "light"] load. We do not have the luxury of waiting. One way or the other we're going to have to take action and buy the hydros, or we will be buying from the market in the short-term and hoping the market doesn't blow out in the medium to long-term. Hearing Transcript, Day 1 at p. 160-161, lines, 24-8.

[5] As Dr, Wilson testified, "it is unfortunate that this is the juncture at which consumer[s] are being protected against the vagaries of a competitive market." Hearing Transcript, July 15, Day 6 at pp. 50-51, lines 24-1.

NWE-10, Stimatz Rebuttal Testimony at p. 5, HRC-2, Power Response Testimony at p. 21. *See also*, Power Hearing Transcript Day 8 at p. 125, lines 7-13. Dr. Power was emphatic on this point stating:

> I think any business firm would use as broad an array of tools [as possible] to evaluate an investment of this size. They would not hang the analysis on a simple discounted cash flow. They would look at it in a dozen different ways to make sure they were comfortable with the commitment of that amount of capital for that period of time.

Id. at pp. 130-131, lines 23-4.

Based on criticism over the DCF analysis, specifically its carbon cost values and projected capital expenditures, and the comparable sales analysis, it is not unreasonable to infer that the real criticism is that the proposed asset price is too high. (Note, however, that what is not being said is that NWE failed to undertake sufficient analysis or consideration of the asset's value.) Of course, whether "the hydros and attractive features they have is worth the price tag that NorthWestern has negotiated … is going to be a judgment call." Power, Hearing Transcript, Day 8 at p. 135, lines 2-5. Since the Commission was not in the negotiating room with NWE and PPLM it can assess the reasonableness of the deal based only on the analysis that NWE and its advisors undertook to assess valuation and witness testimony.

One piece of information that is indisputable is that PPLM rejected a bid of $740 million for the units. NWE-11, Bird Direct Testimony at pp. 7-8, Ex. BBB-1 at p.3. Given this, and given the evidence that shows that a valuation of $900 million for the hydro units is within a plausible range of values,[6] HRC and NRDC believe that the

[6] Credit Suisse, NWE's financial advisor in the matter, estimated the unregulated and regulated value of the hydroelectric assets to be between $750 million and $1 billion and between $800 million and $1.25 billion, respectively. NWE-13, Masud Direct Testimony at p. 12. NWE's DCF analysis of the value of the assets to a third-party produced two different sets of ranges: $790 million to $935 million and $848 million to

Commission should find the proposed purchase price reasonable. Second guessing NWE in this regard would not be a useful exercise. Nor should (or could) the Commission attempt to identify what it would deem a reasonable price, which the Commission would, implicitly at least, need to do were it to find the $900 million excessive.

Moreover, the reasonableness of the price is buttressed by the stochastic analysis, which as Dr. Power testified "is the more sophisticated and informative and complete economic analysis of the alternatives."[7] Hearing Transcript at p. 209, lines 12-14. That analysis clearly demonstrated that a portfolio comprised of the hydroelectric units is significantly lower in both cost and risk than alternative sources of supply. NWE-8, Stimatz Supplemental Testimony at pp.4-6. Even though the stochastic analysis was not undertaken until after NWE bid on the assets, the results of that analysis can and should be considered by the Commission in the exercise of its judgment over the reasonableness of the value of the assets.

3. <u>NWE's Carbon Costs</u>

The proceeding generated much sound and fury concerning NWE's carbon costs. But it signified not much.[8] No one disputed that risk must be considered during resource procurement.[9] Nor can it reasonably be disputed that carbon costs represent a legitimate risk insofar as their potential effect on electricity prices is concerned.[10] Instead the

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$994 million. NWE-11, Bird Direct Testimony at 17-18. Finally, Chief Financial Officer Bird testified that in his dealings with PPL he was led to believe that the assets would not be parted with for less than $1 billion. Hearing Transcript, Day 3 at p. 180, lines 23-24.

[7] Evergreen Economics, the Commission's consultant, appears to agree with this assessment. *See* PSC-4 at pp. 6-9.

[8] "Told by an idiot, full of sound and fury, Signifying nothing." Wm. Shakespeare, Macbeth, V, v, 17.

[9] Nor could it be disputed. § 69-8-419(2)(c) MCA requires public utilities to "identify and cost-effectively manage and mitigate risks related to [their] obligation to provide electricity supply service."

[10] In fact, it should be obvious that carbon should no longer be thought of as a risk but as a factor that will become more and more important in determining electricity prices. As Dr. Dorris testified, "the reality is

concern seems to be about the magnitude of carbon costs or, put another way, about the accuracy of NWE's identification of those costs. *See* Commissioner Kavulla questioning of NWE witness Dorris, Hearing Transcript, Day 2 at pp. 36-76.

Dr. Power's testimony graphically depicts NWE's carbon cost forecasts in juxtaposition with other utilities. *See* HRC-1, Power Direct Testimony at pp. 10-11. These figures show the reasonableness of NWE's projections. The PSC's own consultant, Evergreen Economics, also found NWE's carbon cost projections reasonable. It stated that "NWE's forecast of electricity prices appears reasonable when compared with other, publicly available, forecasts," and that "NWE's carbon price assumptions are in line with internal carbon pricing used by other investor-owned utilities (IOUs) for operational and planning purposes." PSC-4 at pp. 11, 12.

It is true, of course, that there is no way of knowing today how accurate NWE's carbon costs are. In other words, they are projections. There is nothing inappropriate about this. Economic analysis that considers conditions in the future must confront uncertainty. The alternative is just to pretend that one knows the future (and so not characterize the variable as a projection but as a certainty) or omit important variables or not undertake analysis at all. Here, NWE's projections were informed by a variety of sources of information, including guidance from the Commission. *See* NWE-7, Stimatz Direct Testimony at pp. 24-25. In addition, the projections are, as both Power and Evergreen indicate, within the range established by other estimates. In sum, NWE's carbon cost estimates are unobjectionable.

4. Future Price Strips and the Myth of the Cross-Over Point

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there is going to be very, very likely some form of carbon regulation with an explicit cost." Hearing Transcript, Day 1, at p. 227, lines 21-23.

In conducting its analysis – and, as just discussed confronting uncertainty – NWE constructed a price curve. The price curve was based on the Mid-C forward strip, which, when NWE constructed the price curve, went out through 2020. After 2020, prices were escalated at an annual rate of 2.1%. The price curve, which beginning in 2021 had NWE's carbon cost adder applied, was used in the DCF analysis and the stochastic analysis. *See* NWE-7, Stimatz Direct at pp. 20-28.

Dr. Power testified that the forward strip consists of "brokers' judgments about what electricity will sell for at various future dates." Hearing Transcript, Day 8 at p. 122, lines 10-12. Dr. Power continued, "[i]t's a speculative business." *Id.* at line 13. "That forward strip does not tell us what the price will be in 2021 or 2020 or 2019." *Id.* at lines 21-23. Dr. Power went on: "[b]ut to say that we – because we have the forward strip we know what the future price will be is just wrong." *Id.* at p. 126, lines 4-6. NWE witness Stimatz said something similar: "the market that we can buy and sell in now is … of a different character than the market beyond that. So, if in the next two years we can transact in decent quantities. As you start to get beyond that, it gets harder to do that in the market, and it's harder to know what the market will be by the time you get there." Hearing Transcript, Day 2 at p. 227, lines 6-13.

Dr, Power, when asked about the significance to the Commission's decision in the docket of Commissioner Kavulla's observation that "it is possible to go into the market and buy and certain amount of power for delivery at a future time at seemingly low prices" (which is what the forward strip represents) stated as follows:

> I think there's very little significance. If you were to go into that market today, it's not really a market. It's more like over-the-counter type trading.

> For the full amount of generation expected from the hydros, you would not be able to buy power at that low price. You would totally change the market. You would make an entirely new market at a price that would bear absolutely no resemblance to the price we can look at now. So that – I know it sounds like I'm just putting down futures markets, which I'm certainly not. I gave an example before how businesses crucially depend on futures markets to protect themselves.
> But the price – the future price is the expectation of a group of brokers today about what the market will be like in the future. If you dump a huge new load onto that market, the market will change, the expectations will change, the price strip will change. You are in an entirely different world.

Power, Hearing Transcript, Day 8 at pp. 190-191, lines 12-7.

The above statements are important because the forward strip and resulting price curves have been portrayed on numerous occasions throughout this proceeding as ironclad guarantees that this is what the "market" will do. Since the price curve is lower than the cost of the hydroelectric assets in the first several years, this has enabled arguments against the sale of the assets. Moreover, if one assumes that the price curve represents reality for many years into the future, it is possible to change assumptions regarding the value of the hydroelectric assets and make the hydroelectric assets look more expensive than reliance on the market based on the assumed price curve. *See* HRC-2, Power Response Testimony at pp. 2-10.

So, for example, counsel for the Consumer Counsel, in his opening statement, stated that "NorthWestern is projecting a crossover in 2921 … but the up-front costs are well known, while the benefits after 2021 are based on [] assumptions …." Nelson, Hearing Transcript, Day 1 at pp. 47-48, lines 25-4. Dr. Wilson opined that there was a "lengthy period of time for the crossover." Hearing Transcript, Day 6 at p 66, lines 24-25. Counsel for the Commission asked CEO Rowe about customers paying "higher rates" in the early years after the acquisition but then encountering the possibility of another round of deregulation "at the time the economic benefits of the purchase are realized some time after the cross-over point…." *Id.* July 18, Day 9 at p. 227, lines 14-22.

In reality, the "up-front costs" of the hydroelectric assets are not "well-known." (Nor, for that matter, are the benefits from the assets all that speculative since they remove market risk at a reasonable and stable price going forward.) Nor is there is a cross-over point that can be identified with any certainty at this point in time. NWE witness Stimatz got it right when he testified:

> And so, no, I don't think that it's a certainty that seven years will be the time when we have that cross-over point. I think that's reasonable given the information that we have now, and built into our forward curves. I think that's a reasonable time frame. It may be longer than that. It may be shorter than that, and it may be for factors that we haven't anticipated.

Hearing Transcript, Day 2 at p. 227, lines 17-23.

Obviously, if the price curve just a few years out does not necessarily depict what Mid-C markets will do in that relatively near time frame, there is even more uncertainty past that point in time. Thus, relying on the price curve, years into the future, to draw conclusions is an even more egregious error. Counsel for the Commission and Dr, Power had the following exchange:

> Q. Would it be fair to say that you don't believe that it would be economically irrational to acquire the PPLM hydro resources for 870 million simply because the net present value of expected revenue requirements exceeds the net present value of acquiring an equivalent volume of energy at Dr. Wilson's assumed market prices? …
> A. No. My objection is that those assumed market prices don't accurately reflect what market prices will be, number one.
> And, number two, that the appropriate comparison is not to short-run or spot market prices on the regional electric market, but to alternatives that would allow some protections against the volatility associated with that market.

Hearing Transcript, Day 8 at p. 81-82, lines 23-15

HRC and NRDC could not agree more with Commissioner Koopman when he made this same point, only more succinctly: "[s]o, in a sense those market prices are almost irrelevant." Hearing Transcript, Day 2 at p. 229, lines 1-2.

CONCLUSION

The Commission's job in this situation is not to put itself in the shoes of NWE. It is, rather, to ensure that the utility has considered those factors necessary for a reasoned decision and that its decision, based on the totality of the circumstances, is sound. In the end, the Commission must determine that the procurement of the hydroelectric assets is in the public interest. No decision is without risk. Here, however, NWE's effort to reduce reliance on the regional electricity market and to provide its customers with a reasonably priced and stable source of supply, which once again will be regulated by this Commission, calls out for a finding that the benefits of the acquisition outweigh its cost and risk.

Respectfully submitted,

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