



Nebraska Public Power District

"Always there when you need us"

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Subject: Goss & Associates report *"The Costs and Benefits of Public Power: An Investigation of Electricity Rates, Taxes, and Competitiveness"*

Dear Jim and Jessica:

Thank you for providing NPPD with a draft of the Goss & Associates report *"The Costs and Benefits of Public Power: An Investigation of Electricity Rates, Taxes, and Competitiveness"* (The Report). As written, The Report makes several erroneous and/or misleading claims and offers several conclusions that cannot be substantiated by the analysis offered. These erroneous claims and unsubstantiated conclusions appear to be at least partially due to the omission of important information the author may not be aware of or fully appreciate. We would like to meet with Dr. Goss to discuss our concerns in greater detail and to provide information and insights we believe would be useful to a revision of this report.

NPPD is especially concerned about two major issues raised by the author in The Report. The first issue is The Report's inaccurate and misleading characterizations of Nebraska's industrial "rates." The second major issue is the inappropriate analysis used to produce a flawed and meaningless estimate of the benefits of privatization.

Discussion of Nebraska's industrial rates is extremely misleading

The Energy Information Administration (EIA) provides data on total revenues (reported as \$1,000 of revenue), total sales (reported as megawatt hours (MWHs)), and at the state level average revenues per MWH. The values in The Report are average revenues per MWH not actual rates. The industrial "rates" discussed in The Report are a weighted average of at least two very different customer classes.

Nebraska utilities set rates based on the costs of serving different customer classes. For purposes of setting rates, a customer class is made up of customers who consume similar amounts of electricity and follow similar daily, weekly, and seasonal usage patterns. Traditional manufacturing firms such as large fabricated metal companies that typically operate 24 hours a day, 365 days a year are relatively inexpensive to serve per MWH of energy and these companies pay a low rate per MWH. Small fabricated metal companies that typically operate 8 hours a day, 5 days a week are more expensive to serve per MWH of service and are typically in a different customer class with slightly higher rates per MWH. The industrial average revenue per MWH reported by EIA for a state reflects the average of all the customer classes receiving industrial service weighted by each class's annual MWH of electric energy usage.

Beginning with its 2003 data releases, the EIA reclassified irrigation into the industrial category. Because of the large amount of electric irrigation service in the state, the impact of this change had, and continues to have, a dramatic impact on Nebraska's relative average revenue per MWH for industrial service.

Almost exclusively because of the 2003 reclassification, the number of industrial customers in Nebraska increased from 10,642 in 2002 to 30,495 in 2003; this was an increase of nearly 20,000 customers or 186.5 percent in one year. While irrigation numbers are not collected by the EIA, NPPD estimates that between 80 and 90 percent of Nebraska's 57,429 industrial customers are irrigators; this would mean an increase of over 100 percent from 2003 to 2014. Irrigation customers and other industrial customers have very different load characteristics. Irrigation service to customers typically involves more electric facilities and because farmers need to irrigate is highly dependent upon the weather and occurs only a few months each year during periods when demand for electricity from other users is also high, the cost of serving this class is very high per MWH of service.

NPPD has gathered information on average industrial revenue per MWH within our wholesale service area both with and without irrigation. In 2014, including irrigation in NPPD and our wholesale customer's combined average industrial revenue per MWH increased this value by 43.0 percent; the corresponding increases for 2011, 2012, and 2013 were 40.4, 39.7 and 41.1 percent respectively. An alternative approach for Nebraska as a whole would be to compare the average industrial rates for retail utilities without large numbers of irrigators (NPPD, OPPD, LES, Loup City, City of Grand Island, and City of Hastings) to retail utilities with large numbers of irrigators (Cornhusker, Dawson, and Southern). Either approach confirms that the inclusion of irrigation rates in the industrial service category increases the overall average of industrial revenues per MWH by about \$15 to \$20.

To help make electricity a competitive choice for irrigation service, NPPD and its wholesale customers have instituted a demand response program to incentivize farmers to shift their irrigation to periods when other customers are using less electricity. This program has been highly successful in helping to avoid investment in an additional electric power plant to serve this load and in greatly reducing the need to purchase power from other utilities to serve irrigation load in Nebraska.

While industrial rates have increased, traditional, non-irrigation, industrial customers still find Nebraska's actual rates to be very competitive. As noted in the study, Nebraska's recent manufacturing employment gains have been substantially greater than those in surrounding states. Nebraska's greatest challenge to the expansion of manufacturing employment is available workforce, not electric rates.

The Report's gross mischaracterization of Nebraska's industrial rates and their potential impacts on future economic development is a glaring flaw. NPPD offers our assistance to Dr. Goss to develop a more accurate depiction of Nebraska's industrial rates.

Benefits of privatization are erroneously calculated and not substantiated

The potential benefits of privatization calculated in the report cannot be substantiated by the analysis used by the author. The largest privatization benefit is purported to be a reduction in costs due to greater efficiencies after privatization. This would apparently be accomplished by achieving greater economies of scale.

Rather than undertake a detailed analysis of actual costs, the author bases his analysis on data from a single year using the average of operating expenses as a percentage of revenues calculated from a group of investor owned utilities. The author assumes that because NPPD and OPPD's operating expenses as a percent of total revenues are above the average (and about the same as MidAmerican's¹) their costs must be higher than industry standards. This analysis could just as easily conclude that NPPD and OPPD's total revenues are too low (or investor-owned utilities' revenues are too high) and says nothing about actual cost competitiveness. NPPD benchmarks the operating cost of all of our major production facilities for actual cost comparisons. In addition, NPPD benchmarks its total production and transmission rates paid by its wholesale customers against those paid by other distributors in the United States. NPPD's wholesale production and transmission rates have increased in the last 10 years but continue to rank very close to the lowest quartile for the United States among comparable utilities.

There is a very simple explanation for NPPD and OPPD's high operating expenses as a percent of total revenues when compared to investor owned utilities. Most investor owned utilities, such as MidAmerican, are granted a return on their investment of 10 to 12 percent by their regulator. This return on investment would be included in revenues but not in operating expenses and is the primary reason why OPPD, NPPD, and other public power entities should generally have higher operating expenses as a percent of revenues. While publicly owned utilities would generally be expected to have higher operating expenses as a percent of revenues, there are additional, important company-specific factors that must be also be considered when evaluating relative performance. For example, NPPD deferred the recognition of \$77.1 million of revenues in 2014. These deferred revenues will be utilized in future years to reduce the amount needed to be collected from customers and stabilize rates.

¹ The decision to use MidAmerican for comparisons in The Study is surprising given the company's history of rate freezes and the hundreds of millions of dollars of subsidies per year it has received from Iowa and the federal government since 2009.

It is difficult to compare utilities and make generalized conclusions when looking at assets per worker and revenues per worker. It would be more appropriate to look at the assets that each utility is operating, for example utilities that operate nuclear power plants, a great non-carbon source of electricity, will typically have a greater number of employees than a fossil power plant. In addition revenues per worker would be lower for public power districts since no return is included in revenues as described previously.

As previously noted, the analysis uses only a single year of data. A single year of data for a utility can often provide misleading results. For example, NPPD's operating expenses were higher in 2014 due to the refueling outage at our Cooper Nuclear Station. At a minimum, the analysis should compare performance metrics over multiple years.

Another potential benefit of privatization according to The Report is an increase in property taxes to local communities. Because all Nebraska electric rates are cost based, these property taxes would be a transfer of money from rate payers to property tax payers with questionable net benefits to Nebraska. The Report also understates NPPD's tax-like payments to communities. NPPD pays over \$27,000,000 per year in what are called "lease payments" to its retail communities. These "lease payments" should be included as a payment similar to the in lieu of tax category.

Another issue related to the discussion of the potential benefits of privatization is a purported "lack of competition" which might lead to lower levels of investment in electric utility infrastructure in Nebraska. On page 31 of The Report Dr. Goss provides what appears to be a quote from the Nebraska Energy Office: "This gives incumbent developers the right of first refusal when bidding on state transmission line projects, a situation which some politicians believe discourages a competitive bidding process." It is unfortunate Dr. Goss does not provide some elaboration on the role of the Southwest Power Pool in planning and approving such projects. Dr. Goss also does not acknowledge that construction of these projects and the acquisition of materials and equipment are awarded to private contractors through a competitive bid process that helps ensure competition, best practices, and lowest costs.

During the recent period of price increases Nebraska utilities added two new coal plants, two natural gas combined cycle plants, approximately 200 miles of high voltage transmission, and over a 1,000 MW of wind generation completed or currently under construction. All of these facilities will be long lived and their costs have been added to rates in Nebraska. All of the recent wind generation projects were built by private companies using power purchase agreements. These facilities provide long-term fuel diversity. Because of these additions, Nebraska is not expected to require significant additions to generation resources in the near future.

The Report's analysis of estimates of the potential benefits of privatization will require extensive additional work and a totally different approach in order to provide meaningful comparisons of public power utilities relative to privately owned utilities. NPPD offers to provide Dr. Goss with our assistance and information to improve The Report so that it provides the citizens of Nebraska with an accurate portrayal of public power. We hope he will accept our offer.

Additional Concerns

The Report speculates about future compliance costs required by the Clean Power Plan. Nebraska currently benefits from low cost coal-fired generation as the study notes. What The Report does not reflect is that Nebraska utilities have made commitments to diversify their generation, reduce coal use, and undertook major projects and investment at nuclear facilities in order to extend their operating licenses an additional 20 years. Other strategies may be, and likely will be, incorporated to deal with future carbon requirements. There is no attempt in the study to address the important issue of when major, future investments would occur or to explain why investor owned utilities, rather than public power entities, would be better positioned to make these decisions to benefit Nebraska's rate payers. The discussion in the study on this topic is superficial and premature.

In the previous sections of this letter, we have addressed what we consider to be The Report's most serious and important short comings: a.) the discussion of Nebraska's industrial rates is extremely misleading and b.) the benefits of privatization are erroneously calculated and not substantiated. We have also provided some of our concerns about Dr. Goss' speculation as to the potential risks to Nebraska of the Clean Power Plan.

As stated throughout this letter, NPPD wants to assist in the thoughtful, professional development of meaningful and insightful information on comparisons of public and privately owned electrical systems. We believe this project would have benefited greatly from the early involvement of Nebraska's electrical companies and hope this omission will be corrected during what will need to be a substantial rewrite of The Report.

Sincerely,



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