Minnesota Public Utilities Commission

Staff Briefing Papers

Meeting Date: **March 30, 2017** .....Agenda Item: #2*

Company:	Missouri Basin Municipal Power Agency (d/b/a Missouri River Energy Services)
Docket No.	ET10/RP-16-509
	In the Matter of Missouri Basin Municipal Power Agency's (d/b/a Missouri River Energy Services) 2017-2031 Resource Plan
Issue(s):	What action should the Commission take on MRES's resource plan?
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Background Documents

MRES – Initial Filing *Trade Secret* (Appendices A-L).....July 1, 2016
DOC DER - Comments..... December 1, 2016
Missouri River Energy Services – Reply Comments ..... February 28, 2017
DOC DER – Supplemental Comments ..... March 16, 2017
MRES – Letter on Next Filing Date..... March 22, 2017

The attached materials are work papers of the Commission staff. They are intended for use by the Minnesota Public Utilities Commission (Commission) and are based upon information already in the record unless noted otherwise.

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I. Statement of the Issues

What action should the Commission take on MRES's resource plan?

II. Background

Missouri River Energy Services (MRES or the Agency) is a not-for-profit joint action agency. The Agency serves 60 Members, including 24 Minnesota cities. Minnesota is approximately half of MRES's load. MRES also serves communities in North Dakota, South Dakota and Iowa.

About 40 percent of MRES's load is within the MISO market area, although most of its generation (including power supplied by the Western Area Power Administration (WAPA) within the U.S. Department of Energy) is located outside of MISO, in the Southwest Power Pool (SPP).[1] All but 2 MRES Members buy power supply from WAPA under separate contracts (external to MRES). MRES then provides the balance of the power needs for each municipality. Of the 60 MRES municipal Members throughout MN, ND, SD, and IA, 27 Members are located in MISO and 33 Members are located in SPP. Of MRES's 24 MN-Members, 21 Members are in MISO and 3 Members are in SPP.[2]

MRES filed its sixth resource plan for years 2017-2031 with the Commission on July 1, 2016.

Table 1: Basic Information about Missouri River Energy Services

Number of Members	60 municipal utilities, 24 in Minnesota			
Number of MN retail customers served through MRES Members	Approximately 156,000 customers			
Record Peak Load	898 MW in summer of 2011			
Primary Resources	MISO	(MW)	SPP	(MW)
	Municipal Capacity	106.3	MRES Share of Laramie River	281.8
	Point Beach Nuclear Purchase	32.8	Exira Station	140.0
	Red Rock Hydro Project (2018)	55.0	Watertown Peaking Plant	45.9
	Wind Capacity	85.7	Municipal Capacity	28.1
	Total MISO ICAP Capacity:	281.6	**Total SPP ICAP Capacity:**	495.8

[1] WAPA one of four **power marketing administrations** within the U.S. Department of Energy whose role is to market and transmit wholesale electricity from multi-use water projects.

[2] Both MRES's initial filing and the Department's initial comments provide a helpful graphic representation of the MISO/SPP split of MRES Members.

III. Statute and Rules

Relevant Statute

Minn. Stat. 216B.2422 is the guiding statute for resource plans. It requires that an investor-owned utility file a resource plan periodically with the Commission and the Commission shall approve, reject, or modify the plan of a public utility consistent with the public interest.

For all other utilities (including MRES) the Commission's order shall be advisory and the findings and conclusions shall constitute prima facie evidence which may be rebutted by substantial evidence in all other proceedings. The statute also requires that all utilities must include a least cost plan for meeting 50 and 75 percent of all new and refurbished capacity needs through a combination of conservation and renewable energy resources.

Although Commission orders relating to MRES's resource plans are advisory, Minn. Stat. § 216B.2422, subd. 2, resource plans inform Commission decisions on future requests for new energy facilities. Subd. 4 of this same statute provide that the resource planning process is designed to strengthen utilities' long-term planning by providing input from the public, other regulatory agencies, and the Commission.

Relevant Rule

Minn. Rule 7843 governs resource planning and outlines five factors the Commission should consider in its review of a resource plan:

A. reliability of service;
B. customer rates and bills;
C. socioeconomic and environmental impacts;
D. financial, social, and technological factors affecting utility operations; and
E. risk management.

Minnesota Rule 7843.0300, subpart 2 generally requires electric utilities to submit proposed resource plans to the Commission every two years. The resource planning statute and rules are detailed, but basically require integrated resource plans to address (1) the projected energy needs of the utility's service areas over the next 15 years; (2) the utility's plans for meeting projected need; (3) the analytical process the utility used to develop its plans for meeting projected need; and (4) the utility's reasons for adopting the specific resource mix proposed to meet projected need.

IV. The Commission's 2010 Order in MRES Last Resource Plan

On February 21, 2012 the Commission issued its *Order Accepting Resource Plan, Requiring Further Filings, and Setting Date for Next Resource Plan* (2012 Order). The 2012 Order noted that the resource plan had little controversy. The Department concluded that the forecasts of energy and peak load within the plan were reasonable and could be used in future regulatory proceedings, such as a certificate of need application. The Department and MRES differed

slightly on the feasibility of adding wind generation to MRES's resource mix, and on the Department's recommendation that MRES adjust its load shape profile for modeling purposes to better correspond to forecasted demand and energy needs.

The Department found that if wind prices were ultimately lower than contemplated by MRES, additional wind energy purchases would be cost-effective, but MRES provided that the Department's assumptions were based on lower-cost wind and that such a case would be "operationally infeasible" for MRES. The Commission ultimately accepted MRES's resource plan and ordered (in relevant part) MRES consider several recommendations in its next resource plan:

1. The Commission encourages MRES to meet the 1.5 percent energy savings goal in a cost-effective manner.
2. The Commission recommends that MRES include CO2 and externality values in its base case in its next resource plan.
3. The Commission recommends that MRES consider adding additional resources to reduce reliance on market purchases.
4. The Commission recommends that MRES consider additions of wind resources before 2015, if lower cost wind is available.
5. The Commission recommends that MRES consider adjustments to the load shape profiles used in its resource planning model to better correspond to demand and energy forecasts.

V. Overview of the Briefing Paper and Issues Before the Commission

A comprehensive overview and analysis is provided in the Department's initial comments filed on December 1, 2016. Staff does not repeat that detail in this paper and instead provides a high level overview.

In the Party Position section staff provides a summary of the disputed issues that were raised during the comment periods and how, either, they were resolved or an update on their current status.

Most importantly, while the Department had some requests of MRES, as well as recommendations to the Commission to advise MRES to consider or modify their resource plan approach, **the Department recommended the Commission accept MRES's resource plan.**

VI. Initial Filing

Contents and Overview of Initial Filing

MRES included the following in its IRP:

- Introduction and Resource Plan Summary: basic information about the Agency and the resource plan filing.

- Overview of Changes Since the Last Resource Plan:

  - **Environmental Regulations:** Evolving environmental regulations are being monitored closely by MRES as they will have, or will continue to have, an impact on its generation resources. One item of note by MRES is the Wyoming State Implementation Plan for NOx removal was partially disapproved by the Environmental Protection Agency (EPA) in 2014. As a result, the EPA imposed a Federal Implementation Plan (FIP) that has much more stringent requirements than the state of Wyoming's plan. The FIP is under appeal and has been stayed while under review. The FIP, as written, would affect MRES's Laramie River Station coal plant. The FIP required pollution control equipment that would cost MRES over $500 million dollars install, $125 million of which would be attributable to Minnesota Members.

  - **DSM Study:** MRES commissioned a demand side management (DSM) study of the maximum amount of DSM that could be realistically implemented for its Members' retail customers. The study results show an expected potential for DSM of up to 96.5 MW saved, coincident with the peak demands of MRES Member loads, by 2031.

  - **WAPA Integration into SPP:** In 2015, WAPA merged its transmission system into the SPP market area, becoming the first federal power marketing administration to join an Regional Transmission Organization. As a result, all MRES Members are now in either MISO or SPP. In the past, a portion of the MRES energy and planning capacity requirements in MISO were met using MRES resources located outside of MISO. This required the purchase of firm transmission service across the WAPA system. Now that WAPA is part of SPP, it is no longer financially feasible for MRES to purchase transmission across SPP and MRES will now be meeting reserve requirements wholly with each system, either MISO or SPP.

  - **Load Changes:**

    1. WAPA hydropower contracts have been extended from 2020 to 2050.
    2. MRES has amended its power contracts with its S-1 Members (S-1 Members are those that receive power through WAPA contracts) due to the changes resulting from the WAPA integration into SPP and extended the terms to 2057.
    3. Marshall, Minnesota increased its load by 50 MW in July 2016.[3]
    4. Atlantic, Iowa (not an S-1 Member) contracted for up to 3 MW of capacity and energy by 2031.
    5. Pella, Iowa joined MRES in April 2012 contracting for up to 50.4 MW of capacity and energy by 2031.
    6. Hutchinson, Minnesota contracted for 25 MW of capacity and energy through 2046.

[3] Previously a portion of Marshall's load was served by another (non-MRES) supplier.

- **Resource Changes:**

  1. In the new service agreement with Pella, Iowa, MRES began receiving rights to certain power supply facilities, including: 3.3 MW of wind in Iowa (through the MISO market); Pella's local generation including a net of 25.4 MW of diesel generation.
  2. Pella, by obtaining power supply from MRES, was able to permanently retire its 25 MW coal plant.
  3. In June 2014, Marshall, Minnesota moved to the MISO region from the SPP region, and with that transfer, MRES's MISO generation increased by 15.2 MW of municipal generation and 18.7 MW of wind generation.
  4. In 2011, MRES entered in an agreement to obtain a share of the two Point Beach nuclear units for 32.8 MW of capacity, reducing to 16.4 MW after 2030.
  5. Half of MRES load is in SPP, however, the bulk of MRES generation is in SPP. This has created a surplus of capacity in the SPP region and a shortfall of capacity in MISO for MRES Members. MRES has entered into two capacity sales in SPP, and three capacity purchase in MISO.[4]
  6. MRES has amended its power contracts with its S-1 Members (S-1 Members are those that receive power through WAPA contracts) due to the changes resulting from the WAPA integration into SPP and extended the terms to 2057.
  7. Recent EPA regulations affecting some small generators have caused the loss or replacement of some capacity (a decrease of 8.9 MW of capacity) and a loss of 3.7 MW of interruptible load agreements.[5]
  8. MRES is developing two new renewable projects: the Red Rock Hydroelectric Project on the Des Moines River in Iowa (up to 55 MW at spring and summer water levels) and the Pierre, South Dakota Solar Project (1 MW).

- Update of Several Matters Since the Last Resource Plan

  - **Electric-Vehicle (EV) Load:** The previous resource plan included a projected 4.6 MW of coincident load impact by 2025, the predicted amounts have not materialized and MRES did not model an EV load in this resource plan.
  - **Compressed Air Energy Storage:** The previous resource plan noted that MRES was investigating a 45 MW Compressed Energy Storage Project. Since, the project was terminated and MRES has terminated membership in the project.

- MRES Load Overview: MRES conducted a load overview for each of its Members and the peak in the summer of 2016 is anticipated to be 855.5 MW (cumulative, both in SPP and MISO), lower than its all-time historic peak of 898 MW in 2011. This load is expected to grow to 995.7 MW in 2031 in the base forecast.

- Demand-Side Management and Conservation Efforts: MRES commissioned a DSM

[4] The SPP surplus is anticipated to be 210.5 MW in 2017 and the MISO deficit is anticipated to be 59 MW in 2017, both post capacity purchase and sales.

[5] The EPA regulation include the Reciprocating Internal Combustion Engine (RICE) rules and

potential study, which it included in its plan at Appendix H.

- MRES Resource Overview: In light of the WAPA integration into SPP, MRES now conducts separate resource plan analyses for its two regions in MISO and SPP. Only resources within the same RTO, or that have firm transmission rights between RTOs, may be used to meet the capacity requirements in an RTO. MRES noted it had limited transmission rights between the regions.

- Short Term Action Plans: Due to the shortfall in the MISO region, MRES noted it will continue efforts to address the capacity deficit. MRES plans to: complete its Red Rock Hydroelectric Project, obtain additional peaking capacity in the next five years, continue to assist Members in implementing their DSM and conservation activities, obtain wind or other renewables as needed, and continue to efforts to develop enforceable and workable federal and state policies.

- RES Compliance: MRES projects that enough wind is included in the resource plan models to meet its RES and the other renewable objectives in other states it serves.

- Public Interest: MRES argued that the plan is in the public interest because it ensures that MRES is able to continue to meet the needs of its Members in the long-term and it balances affordability, reliability and environmental responsibility.

VII. Party Comments

The Department was the only party to file comments on MRES's IRP. The Department recommended generally that the Commission accept MRES's resource plan (among other recommendations).

The Department conducted a thorough review of the plan, which is not repeated here. Absent the items discussed below in which the Department made suggestions, the Department found that MRES's analysis and resource plan was generally acceptable or reasonable.

In the Department's initial comments it made both 1) requests for supplemental information to be provided by MRES in its reply comments and 2) recommendations for the Commission to make in accepting the resource plan.

In reply comments, MRES objected to several of the items requested by the Department. The Department responded to those objections in its supplemental comments. Each item is discussed below.

The Department's Request for Supplemental Information in Reply Comments

In the Department's initial comments, it requested that MRES provide additional DSM-related information in its reply comments. That information requested included, first, several questions related to DSM:

- An explanation for why the historical energy savings shown in Table 3-2 of MRES's IRP differ from the MRES energy savings shown in the Department's Electric Savings Program;
- the projected lifetime energy savings and lifetime $/kWh for each year of MRES's IRP;
- the Agency's historical incremental energy savings as a percent of wholesale sales, both for Minnesota only sales and for total system-wide sales; and,
- a description of the Agency's contingency plan in the event that MRES is unable to achieve the larger level of energy savings specified in its Total Base Case scenario.

The Department acknowledged in its supplemental comments that MRES provided the DSM-related information and recommended that MRES include this information in similar detail in its next resource plan. The Department argued that it helps provide parties and the Commission a more complete picture of the Agency's DSM achievements and goals.

Second, the Department requested that MRES provide additional greenhouse gas (GHG) information in its reply comments. That information included two requests, first:

- A description (including amounts and locations) of the additional load added to its system since 2005.

The Department acknowledged in its supplemental comments that MRES provided the GHG-related information. MRES noted that since 2005 it had 130 MW of new load switch from other MN-wholesale suppliers to MRES and that the increase in of load was not due to member growth. The Department indicated that the additional information provided clarity on the Agency's ability to meet Minnesota's greenhouse gas reduction goals. The Department suggested that before the next resource plan it would discuss with MRES potential ways to portray changes in mass CO2 emission rates.

The second request was regarding a comparison of projected MRES CO2 emissions to 2005 levels:

- An analysis that compares 2005 statewide power sector carbon dioxide emissions (total annual emissions of carbon dioxide from MRES's generation of electricity within Minnesota and all emissions of carbon dioxide from the generation of electricity imported from outside the state and consumed by MRES's customers in Minnesota) with projected statewide power sector carbon dioxide emissions over the length of the planning period assuming both Total Base Case and Expected Conservation achievement scenarios.

The Department acknowledged in its supplemental comments that MRES provided the GHG-related information as requested. However, the supplemental information provided by MRES showed that while MRES CO2 emission *rates* will be reduced by 52 percent in 2031, MRES only projects a 3 percent reduction in total CO2 emissions in 2031 (from 2005 levels) due to increased load and the expiration of its Point Beach nuclear power contract. The Department noted it will discuss this issue further with MRES before the Agency files its next resource plan.

The third, and last, Department request was for supplemental information regarding additional modeling of generic wind and solar units as a single, per MWh charge was objected to by MRES. That item was also one of the Department's recommendations for the next resource plan, discussed below.

Objections to the Department's Recommendations

In MRES's reply comments, it objected to several of the Department recommendations to the Commission. The Department provided responses to MRES's objections in its supplemental comments. Each is discussed by topic below.

1. **Forecasting**

The Department's original recommendation regarding the short-term *energy* forecast was as follows:

> "There is no reason to adjust the forecast provided by MRES. MRES may wish to consider simplifying its forecast methodology going forward, as it does not appear to result in a more accurate forecast."

MRES responded in reply comments that its longstanding methodology was complex, but accurate and the methodology it uses provides essential data that MRES uses for other purposes. MRES requests that the Department withdraw this recommendation and the Commission not accept it.

The Department's original recommendation regarding the short-term *demand* forecast was as follows:

> "The Department recommends that the Commission accept MRES's short-term demand forecast for planning purposes. Also, the Department recommends that the Commission advise MRES to construct and file a regression model of demand for its Minnesota members within six months of the Commission Order in this proceeding."

MRES argued in its reply comments that the Department recommendation to file the regression model for demand was unnecessary and creates additional complexity that does not improve the integrity of the demand forecast. MRES noted that the Department conceded that its own regression analysis does not result in a significant difference and the Department acknowledged that MRES's methodology is adequate for planning purposes.

The Department responded to both the short term energy and demand forecasts in its supplemental comments:

> "The Department regards its MRES IRP comments as advisory, with the primary goal of ensuring that the Agency's action plan will provide adequate service. In some cases, MRES has asked the Department to withdraw some of its recommendations. The Department declines to withdraw recommendations, but instead recommends that the Department and MRES discuss forecasting issues at least six months before the Agency

submits its next IRP."

The Department's supplement recommendations on this topic recommended that for the *instant* resource plan the Commission: 1) accept the MRES short-term energy forecast as filed and 2) accept the MRES short-term demand forecast for planning purposes.

The Department's supplemental recommendations on this topic recommended that for the *next* resource plan that MRES meet with the Department within six months of the Commission Order to discuss forecasting issues raised by the Department in its initial comments.

2. **Modeling and Supply-Side Recommendations**

The Department recommended in its initial comments, and again in its supplemental comments, that the Commission advise MRES to consider the following:

A. additional conservation achievement under a variety of contingencies, similar to how supply units are studied;
B. modeling a greater number of contingencies, including modeling price contingencies for all resources options that are presented to the Agency's IRP model;
C. making generic units with varying characteristics available in different years if it would aid in the Agency's modeling;
D. consider ways to further limit the Agency's exposure to spot market prices;
E. modeling all costs for generic wind and solar units as a single, per MWh charge; and
F. reconsider the Agency's analysis of wind and solar additions with a goal of determining the price per MWh at which additions of wind and solar capacity are least cost for MRES's system.

MRES objected to most all of these suggestions by the Department either by asking the Department to withdraw their recommendation or by asking the Commission not to accept the Department recommendation. In most instances both MRES and the Department indicated they would continue discussions on these matters.

For example, the Department, in initial comments, recommended among other things, that MRES "update its analysis of wind and solar additions by modeling all costs for generic wind and solar units as a single, per MWh charge; with a goal of determining the price per MWh at which additions of wind and solar capacity are least cost for MRES's system."

In MRES reply comments, it objected to conducting additional modeling for this instant resource plan for several reasons. First, MRES did not use any tax credits as at the time of modeling, the PTC had expired and had not yet been renewed. MRES noted it conducts its modeling with the laws and regulations that in place at the time of the modeling. Second, the benefit of developing additional data is outweighed by the burden to MRES in conducting new models. MRES argued that it does not have staff or resources to do so. Third, MRES believes that there would be little usefulness in constructing new models for this resource plan iteration, since it believes that the

models constructed for this resource plan are valid – in that it found that the breakeven price for wind was $76/MWh and $95/MWh for solar.

The Department provided in its supplemental comments in response, generally, to the MRES objections that:

> As previously noted, the Department regards its MRES IRP comments as advisory, with the primary goal of ensuring that the Agency's action plan will provide adequate service. In some cases, MRES has asked the Department to withdraw some of its recommendations. The Department declines to withdraw recommendations, but instead recommends that the Department and MRES discuss modeling issues before the Agency submits its next IRP.

…

> According to Minnesota Statutes 216B.2422 Subd. 4, the Commission is unable to approve a nonrenewable facility unless a utility has shown that a renewable energy facility is not in the public interest. The Department recommended changes to the Agency's renewable energy facility modeling to facilitate this type of showing. The Department notes that MRES's present approach, if used in a Minnesota certificate of need (CN) process, may not be sufficient to demonstrate that a renewable energy facility is not in the public interest. The Department's recommended approach makes identification of the least cost level of renewables simpler, while enabling greater flexibility in model design—if the flexibility is desired. The Department notes that the difficulty in interpreting MRES' modeling approach means that, in a CN proceeding, the Department would be likely to follow a different approach and may, as a result, arrive at a different conclusion.

Last due to the differences in modeling approaches, the Department made a clarifying recommendation regarding what type of modeling would be necessary for a certificate of need application in Minnesota.

C. RECOMMENDATIONS FOR PREPARING FOR A CERTIFICATE OF NEED

> The Department recommends that MRES update its analysis of wind and solar additions by modeling all costs for generic wind and solar units as a single, per MWh charge; with a goal of determining the price per MWh at which additions of wind and solar capacity are least cost for MRES's system.

VIII. Staff Discussion

Much of MRES's resource plan is not in dispute. The Department's initial and reply comments and analysis of the plan was in depth and complete. The Department's recommendation in its initial comments, and reiterated in its supplemental comments, was that the Commission should accept MRES's resource plan.

MRES complied with the request of the Department to file supplemental information in their reply comments, which the Department noted were sufficient.

While there continues to be dispute about the Department's recommendations regarding modeling modifications that MRES should consider, both MRES and the Department have indicated their willingness to continue discussions on these matters before the next resource plan. The Commission's role in accepting this resource plan is advisory only, and the Department is asking MRES to continue *consideration* of their recommendations. MRES made reasonable arguments in their reply comments on why some of the recommendations are not feasible, practical or useful either at this time or potentially in the future, however, between now the next resource plan factors may change that allow MRES to implement some of the modifications the Department requests. Recommending MRES continue to consider those requests, in light of their system and available resources, is reasonable. Additionally, it would memorialize the recommendations in the record and order and advise MRES to continue to consider these requests, but only to the extent practicable.

Staff also believes the Department's commentary on the modeling and its applicability to certificate of need filings is helpful as it provides additional clarity for this record and for future dockets that may arise. While the modeling used in this resource plan may not be conducted in a manner that is useful for a Minnesota-based certificate of need proceeding, it seems reasonable that if MRES intends to develop a generation resource in Minnesota and files a certificate of need application, it would be required to provide the information (and modeling information) sufficient to prove its case at that time.

Staff agrees with the Department's recommendations, that with the additional recommendations it provided, the Commission should accept MRES's resource plan. Staff highlights its agreement with the Department's additional advisory recommendations that specifically pertained to MRES's reliance on the spot market and its recommendations that MRES to continue to evaluate ways to lessen their reliance on the market. The Commission has historically advised or required utilities to keep their reliance on the energy market as limited as reasonable.

Last, as a procedural matter, MRES filed a letter on March 22, 2017 indicating that MRES and the Department had agreed on a proposed filing date of July 1, 2021. MRES noted that this date reflects the average intervals of past plans. MRES and the Department agreed that in the event there are substantial changes in the next 5 year period, MRES would file a notice of changed circumstances. MRES outlined those substantial changes to be modifications such as additional resource acquisitions or exchange or changes to Member load in which MRES could not meet.

IX. Commission Decision Alternatives

1. Accept MRES's resource plan as filed and supplemented in its February 28, 2017 reply comments, with advisory recommendations as noted below.
2. Reject MRES's resource plan.
3. Take some other action.

Recommendations for Instant IRP (DOC)

4. **Energy and Demand Forecasting**
   a. Accept the MRES short-term energy forecast as filed.
   b. Accept MRES's short-term demand forecast for planning purposes.
   c. Require that MRES meet with the Department within six months of the Commission Order to discuss forecasting issues raised by the Department in its initial comments.

5. **DSM Resources**
   a. Advise MRES to continue to strive to meet the energy savings of the Total Savings Base case.

Recommendations for Next IRP (DOC)

6. **Energy and Demand Forecasting Issues**
   a. To facilitate an adequate assessment of the Agency's forecasts in its next IRP, MRES shall meet with the Department within six months of the Commission's Order in this docket to discuss forecasting issues raised by the Department in its initial comments.

7. **Modeling and Supply-side Recommendations**
   In its next resource plan, MRES should consider:
   a. additional conservation achievement under a variety of contingencies, similar to how supply units are studied;
   b. modeling a greater number of contingencies, including modeling price contingencies for all resources options that are presented to the Agency's IRP model;
   c. making generic units with varying characteristics available in different years if it would aid in the Agency's modeling;
   d. consider ways to further limit the Agency's exposure to spot market prices;
   e. modeling all costs for generic wind and solar units as a single, per MWh charge; and
   f. reconsider the Agency's analysis of wind and solar additions with a goal of determining the price per MWh at which additions of wind and solar capacity are least cost for MRES's system.

Recommendations for Preparing for a Certificate of Need (DOC)

8. If MRES files a certificate of need with the Commission, it should update its analysis of wind and solar additions by modeling all costs for generic wind and solar units as a single, per MWh charge; with a goal of determining the price per MWh at which additions of wind and solar capacity are least cost for MRES's system.

Next Resource Plan

9. MRES should file its next resource plan on July 1, 2021