

Staff Briefing Papers

Meeting Date	May 23, 2019		Agenda Item *4
Companies	Minnesota Municipal Power Agency		
Docket No.	ET6133/RP-18-524		
	In the Matter of MMPA'	s 2019 – 2033 Resource Plan	
lssue	What action should the Commission take on MMPA's resource plan?		
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✓ Relevant Documents	Date
Initial Filing- MMPA	July 31, 2018
Initial Filing – MMPA Supporting Documents 1 through 8	July 31, 2018
Comments Minnesota Department of Commerce	November 26, 2018
Reply Comments - MMPA	November 29, 2018

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I. Statement of the Issue

1. What action should the Commission take on MMPA's resource plan?

II. Background

Minnesota Municipal Power Agency (MMPA) filed its third resource plan with the Commission on December 20, 2013.

Listed below is some background information about MMPA:

Number of Members	12 municipal utilities (Elk River added in 2018)
Number of Minnesota retail customers served through MMPA's members	74,0001
Record peak load	344 MW (July 17, 2017)
Primary resources	Faribault Energy Park (FEP, 261 MW), Shakopee Energy Park (SEP, 46.4MW) Minnesota River Station (MRS, 40 MW), Hometown BioEnergy, 8MW anerobic digester, Black Oak Getty Wind Farm (BOGF, 78MW), Oak Glen Wind Farm (OGWF, 44 MW), Buffalo Solar Facility (BSF, 7.1 MW)

For comparison, here are the number of retail customers served by some investor owned utilities serving Minnesota:

Minnesota Power: 143,000 SMMPA: 114,707 Otter Tail Power Company: 60,700

Initial Filing

Both the public and trade secret versions of MMPA's resource plan totaled 69 pages plus supporting documents. MMPA included the following in its IRP:

- Executive Summary and "About MMPA": basic information about the Agency and the resource plan filing;
- Business Environment: A five page summary of issues such as energy industry in transition, low natural gas prices, U.S. Retail Electric sales stagnant, uncertainty of EPA emissions standards, Initiatives to reduce carbon dioxide emissions, generation

¹ In its 2013 resource plan, MMPA stated it served 69,000 retail customers.

interconnection risks, continuation of MISO market enhancements, and other economic factors;

- Projected Energy Requirements: a discussion of the projected slowdown between MMPA's historical and future energy requirements the level depending the assumed level of conservation;
- Projected Demand Requirements: depending on the level of conservation, a discussion of the projected Agency's historical versus future demand requirements could rise or fall;
- Conservation/DSM: MMPA's participating members met their 1.5% CIP spending requirement in 2015-2017, and achieved CIP savings of 1.1% in 2015, 1.4% in 2016, and 1.3% in 2017;
- Existing Resources: A summary of MMPA's existing resource portfolio (434 MW of owned or contracted resources);
- Additional Capacity Requirements: MMPA projects that it will not need new capacity until planning year 2030;
- Planning Approach and Resource Projects: MMPA projects that it will not need new capacity until planning year 2030.
- Short Range Plan: MMPA is projected to have adequate capacity through planning year 2029. However, in the future if MMPA instead has a deficit, the incremental difference could be covered in the short-term capacity market;
- Long Range Plan: When MMPA's capacity need becomes near term, the Agency would conduct a detailed evaluation of resource alternatives. The Agency anticipates considering new generation and power purchases to meet its needs;
- RES Compliance and Rate Impact: MMPA is positioned to continue to meet the RES through its mix of purchases and resources.
- Public Interest: MMPA explains why its plan is in the public interest.

MMPA also included Appendix A, Load Projection Methodology, Appendix B, its Advance Forecast, Appendix C Renewable Energy Standard Rate Impact Report, Appendix D Regulatory Requirements Cross Reference Index.

III. Parties' Comments

The Department of Commerce (Department or DOC) was the only party to file comments on the resource plan.

DOC:

MMPA'S PLANNING APPROACH

The DOC indicated that MMPA concluded that no capacity is needed for the next eleven years; therefore, the Agency did not evaluate resource alternatives. However, MMPA stated that it



"will continue to evaluate the energy market to understand options to meet its future electric supply needs."

MMPA'S PROPOSED (PREFERRED) PLAN

The DOC indicated that over the next five years, MMPA does not plan to acquire additional supply-side resources, but the Agency will continue to develop and market cost-effective conservation programs for its member utilities to offer their retail customers. Over the full planning period, MMPA will continue monitoring its capacity needs and plans to conduct a detailed evaluation of resource alternatives once capacity needs become near term.

ASSESSMENT OF ENERGY AND PEAK DEMAND FORECAST

For the purposes of planning, the Department concludes that the energy and coincident and non-coincident peak forecasts presented by MMPA are satisfactory.

Resource Needs

With regards to long-term planning, MMPA noted that the costs of different technologies for capacity are rapidly changing and thus it is not particularly useful to create a plan for addressing the Agency's shortage at this time. The Department and MMPA discussed this issue and the Department agreed that it was not necessary for the Agency to create a long-term plan at this time. MMPA committed to monitoring the cost of generation technologies and creating a plan, evaluating the various resource alternatives, when the need becomes near term. The Department agrees with MMPA's analysis.

DEMAND-SIDE MANAGEMENT (DSM) RESOURCES

Although the Agency assumed that its energy savings over the planning period would be 1.3 percent of retail sales, the Department supports MMPA's commitment that the Agency and its members would continue to strive to achieve energy savings approximating 1.5 percent of retail sales.

50 Percent and 75 Percent Renewables/DSM

MMPA's base case already assumes that at least 75 percent of its new energy needs will come from a combination of new renewables and conservation. Consequently, MMPA's resource plan complies with this statutory provision.

Compliance with Renewable Energy Provision

Over the planning period, MMPA's RES requirement increases from 312,617 MWhs in 2019 to 511,012 MWhs in 2033. MMPA's IRP shows that the Company expects to far exceed these requirements over the planning period, with MMPA's five existing renewable resources expected to generate 465,800 MWh per year, and MMPA's 30-year 170-MW wind power



purchase agreement with NextEra starting December 2019 expected to generate 600,000 MWh per year.

Environmental Issues

The Department concludes that MMPA's tracking of important environmental issues is reasonable.

Greenhouse Gas Reduction Goal

The Department notes that the Commission has never approved a specific methodology for evaluating progress towards Minnesota's greenhouse gas reduction goals. However, the Department believes that MMPA's approach reasonably represents changes in the Agency's CO2 emissions over time.

MMPA has made impressive reductions in its CO2 reductions and appears to be well on its way to reducing its emissions 80 percent below 2005 levels by 2050. The DOC notes that MMPA's reductions are occurring even though MMPA began serving Elk River in October 2018.

Summary of DOC Recommendations

A. REQUESTS FOR MMPA'S REPLY COMMENTS

In its Reply Comments, the Department requests that MMPA:

- provide a table similar to Figure 3 that shows CIP energy and demand savings for all its members for 2010-2017; and
- provide the historical energy and demand savings for all of MMPA's members for 2010-2017, shown both in first-year kWh saved and as a percentage of retail sales.

B. RECOMMENDATIONS FOR MMPA'S INSTANT IRP

The Department recommends that the Commission accept MMPA's IRP as filed, with the expectation that the Agency will continue to strive for annual energy savings of 1.5 percent.

MMPA: In Reply comments, MMPA provided a table that shows CIP energy and demand savings for all its members for 2010-2017. Also, MMPA provided the historical energy and demand savings for all MMPA's members for 2010-2017, shown both in first-year kWh saved and percentage of retail sales as requested by the DOC.

IV. Staff Analysis

Given MMPA's resource plan and the recommendations of the DOC, Staff recommends that the Commission accepts the 2019-2033 resource plan submitted by MMPA as filed.



With respect to MMPA's next IRP filing, MMPA informally indicated that it would like to provide a quick update on demand/energy forecast and any new resources including demand side programs, if any, on August 1, 2022 with the next IRP due on August 1, 2025. MMPA provided this proposal given that the Agency has no capacity needs until 2029-2030 time frame, MMPA believes there would not be any value in an IRP any earlier.

The resource planning statute does not specify how often resource plans should be filed, leaving that to Commission discretion. The Commission's rules specify biennial filings, but as resource plans have become more complex the Commission has sometimes altered that requirement, especially for cooperatives and municipal power agencies.² At this point, MMPA's next IRP filing would be due on August 1, 2020. As such, the Commission may wish to solicit recommendations from the parties at the Commission's agenda meeting.

² For example, the Commission granted Missouri River Energy Services (MRES) an extension to 2016 (from its 2010 resource plan) since MRES had shown it "provides sufficient baseload energy resources for at least the next five years." See Order Accepting Resource Plan, Requiring Further Filings, and Setting Date for Next Resource Plan in Docket ET10/RP-10-735 at page 4.

V. Decision Options

- I. What action should the Commission take on MMPA's filing?
 - A. Accept MMPA's 2019-2033 IRP.
 - B. Do not accept MMPA's 2019-2033 IRP.
 - C. Take no action on MMPA's 2019-2033 IRP.
- II. What date should the Commission designate for the filing of MMPA's next resource plan?
 - A. Establish a date based on a consensus of the parties at the agenda meeting.
 - B. Require MMPA to file its next resource plan no later than two years from the date of the Commission's Order in this matter.
 - C. Require MMPA to file its next resource plan no later than August 1, 2025 conditioned upon MMPA filing the following compliance filings:
 - a) MMPA shall file a status update on its demand side management efforts by August 1, 2022; and
 - b) MMPA shall file a status update on its any new resources including demand side programs by August 1, 2022.
 - D. Require MMPA to file its next resource plan no later than August 1, 2020.
 - E. Require MMPA to file its next resource plan no later than August 1, 2021.

VI. Staff Recommendation

Staff recommends that the Commission adopt IA.