



HIGHLIGHTS OF POWER SUPPLY ADVISORY TEAM MEETING

Friday, May 29, 2020 – 10 a.m. – 2:30 p.m.
Virtual Meeting held by MLGW and Siemens

Siemens presented an overview of MLGW’s draft IRP report and representatives from MISO gave a presentation about their services.

- Overview / Meeting Objectives – J.T. Young
 - Moment of silence for David Freeman, Friends of the Earth
 - PSAT has been meeting for over a year. The Draft Review was presented by Siemens for comments and questions from PSAT members.
 - Thursday, June 4, 6 - 7:30 p.m. there will be a Community Meeting held for public questions/comments. Information will be sent out with specifics.
 - Plans are to make a recommendation to the MLGW Board of Commissioners in late July or early August .

- Agenda and Executive Summary – Gary Vicinus, Siemens
 - Siemens consults and conducts studies all over the U.S. as well as outside the U.S. and their sole interest is to benefit MLGW with providing the best strategies for MLGW to make a decision. The IRP process is designed to evaluate options for MLGW to supply its current and forecasted load while meeting key objectives.
 - Analyses and results were presented so that MLGW can use that information to determine the best path forward for Memphis (Eleven portfolios were presented and evaluated). There is a combination of generation and transmission investments that have to be considered.
 - Building local resources (i.e. generation) is less expensive than the all-MISO option
 - TVA Options include:
 - 5 year agreement
 - Long Term agreement, which would reduce cost
 - Portfolios 5, 6, 9 and 10 offers a combination of local supplies + MISO

Summary of Findings

- Future supply Portfolios 5 and 9 were identified and could provide savings of over \$1.9 billion in 2018 dollars for the 2020 to 2039 period with respect of the TVA’s Existing Contract and \$1.5 billion with respect of the Long Term Partnership contract. The sum of the \$1.9 billion savings becomes about \$3 billion in nominal dollars (including inflation).
- Siemens presented its findings regarding the tradeoffs among cost, risk, reliability, sustainability, resilience, and economic development
Specifics shared on the following:
 - (PILOT, benefits, gap analyses, TVA cost),
 - Results of the Risk Analysis,
 - Balanced Scorecard

- Explain No Regret Positions for each Strategy
 - Describe the Waterfall showing the components of Savings among Strategies
 - Recommend next steps – MLGW should issue a Request for Proposal (RFP) to confirm projected cost savings before making a final decision
- Midcontinent Independent System Operator (MISO) Overview and Membership Assessment – Melissa Seymour, MISO
 - MISO’s Key Functions – Keeping the lights on, Operating Open Energy Markets and Performing Transmission Planning. MISO has 42 million customers. MISO has no physical assets and members own the lines. MISO manages the flow on the transmission system by directing generator usage.
 - MISO will continue to support the evolution of resources on the bulk electric grid. They have a diverse portfolio and there is projection by 2030 for a significant shift in renewables.

- Summary of answers from PSAT to MISO
RESOURCE ADEQUACY ASSESSMENT

- Siemens’ proposal provides MLGW with adequate resources to join MISO Local Resource Zone (LRZ) 8 or to be its own stand-alone zone
- If MLGW were to join MISO it would lower the Installed Capacity (ICAP) Planning Reserve Margin (PRM) from 18.2% to 17.9%
- MISO is unable to provide direction on how much excess capacity would be available for purchase

TRANSMISSION INTERCONNECTION ASSESSMENT / COST

- MISO validated the physical transmission import capability up to 2,400 MW during 2024 summer peak conditions
- MISO’s estimated the transmission expansion, reliability upgrades, and interconnection costs to be \$736.2M vs. \$728.2M by Siemens. (The Siemens cost estimate is adjusted to match MISO’s assumptions regarding contingencies and inflation.)

MARKET IMPACT ASSESSMENT

- MLGW could realize annual production cost savings of \$92.6 million in 2024 to as much as \$268.6 million in 2034 (note: these totals do not account for fixed costs)
- Projections show MLGW self-supplying 50% of its energy needs in 2024 and increasing over time
- No significant changes to congestion patterns were observed

MISO ADMINISTRATIVE COST RECOVERY FEES

- Based on a projection of MISO’s annual operating expenses MLGW’s share of MISO’s costs would be approximately \$6 million annually
- As a MISO member MLGW would be charged a portion of FERC’s annual budget. This cost is estimated at an additional \$730,000 per year.

MLGW has requested that MISO evaluate an additional option which includes no local generating resources (i.e. All-MISO option)

- MISO has committed to delivering the results of its analysis prior to MLGW’s Integrated Resource Plan (IRP) being finalized in early July

- IRP Overview - Siemens believes that MLGW should conduct an RFP to verify savings before making a final decision regarding both TVA and the best Portfolio options.
- Questions and Comments from PSAT were taken