HIGHLIGHTS OF POWER ADVISORY TEAM MEETING
TUESDAY, APRIL 30, 2019
MLGW ADMINISTRATION BUILDING AUDITORIUM

Attendees included:
Harold Byrd  Bo Mills  Gale Jones Carson
Mark Halperin  Dennis Lynch  Frank Fletcher
Sally Heinz  Doug McGowen  Rod Cleek
Jenn Hunsperger  Mike Pohlman  Alonzo Weaver
Martavius Jones  Randy Richardson  Roland McElrath
Eddie Jones  Beverly Robertson  Cheryl Patterson
Richard Kelley  J.T. Young
Dwain Kicklighter  Jim West

• **J.T. Young** – Provided a Safety briefing and an overview of the role and benefits of having the Power Advisory Team. Members were introduced and the MLGW Mission, Vision and Values shared along with the Organizational Structure
  • Why we are here
    • Proper input on supplier
    • Power Advisory Team does not have the ultimate decision
    • Provide a valid recommendation
    • The difference between least cost vs. lowest cost
    • Factor in all impacts
    • Preferred supply arrangement
    • Determine what is optimal for the long run
  • Request for Proposal – May 17 due back (RFP for a consultant as a guide for the process)

• **Jim West** – Customer Prospective
  • Reliability
  • Low Reasonable Costs
  • Energy Efficiency
  • Pricing Options – how to provide options to customers
  • Environmental Stewardship

• **Gale Carson** - Community Perspective
  • Sustainability of supply and environmental stewardship
  • Economic and community development
  • Fairness – provide reliable service to ALL customers
  • Partnerships and collaboration
  • Reliability and resilience of power supply (ability to withstand effects of storms and other adverse impacts)

• **Frank Fletcher/Cheryl Patterson** - PSAT Purpose
  Advisory Team Member Roles/Responsibilities/Expectations
  • Provide input into MLGW’s Integrated Resource Plan (IRP)
  • Help MLGW consider optimal long-term power supply solution
• Input from this team will be used to facilitate the recommendation to MLGW’s Board regarding optimal electricity resources for the next 20 years
• Late August – community meetings will be held
• Meeting locations will be held primarily at MLGW Administrative Building (Plans are in the works to secure other locations)
• The PSAT is expected to meet monthly for the remainder of 2019; the possibility of additional meetings in 2020
• The PSAT meetings will be working sessions and open to the general public; no public comments will be taken during the meetings

Ground Rules
• Governance – MLGW’s Charter (can be found online at mlgw website)
• MLGW Board – established as a 5 member Board with 2 advisory members, the Board takes action first, then the City Council
• Charter – specifics on what you can spend money on and what is leftover is a savings to the customers
• Recommendations for CEO and then a recommendation is made to the Commissioners

Electricity 101 – Reggie Bowlin
• Glossary of Terms (Basic Electricity Principles)
  o Load factor – ratio between average load and maximum load
• Overview of Generation / Transmission / Distribution
  o Bulk Electric Systems (BES) – always balancing supply needs
  o Demand side strategies
  o North American Electric Reliability Corporation (NERC) – non-profit Regulatory Agency that sets reliability standards, penalties if not met. TVA does the work for us in working with NERC. Recently had an audit by NERC and we passed. A lot of work involved in gathering information needed.
  o Different types of ways to generate power – Find the most efficient blend of power resources, stack generation
  o Allen Plant is now TVA owned, there are four delivery points in our area so if one goes down, we are still up and working.

MLGW Overview – Rod Cleek
• Background
  o MLGW is TVA’s largest customer, representing about 10 percent of TVA’s total load
  o MLGW owns no generation in its footprint, nor ties to other generation or transmission entities
  o MLGW has a Summer peaking load (Load reached 3,097 MW in the summer of 2018; peak load levels of 3,533 MW in the summer of 2007 )
• Existing Infrastructure
• Electric Rates (How does MLGW rates rank) – 6th straight year for lowest combined residential bill

MLGW/TVA Overview – Alonzo Weaver
• MLGW/TVA Relationship
  o We have a full-requirements power contract with TVA
  o MLGW represents approximately 10% of TVA’s system load
  o MLGW does not own or operate any generation facilities, nor are there any Generator Owners within the MLGW TOP area
Likewise, MLGW has no blackstart resources (engines to crank up) or capacity; we are dependent upon TVA, our only neighboring Transmission Operators (TOP), for restoring any loss of Interconnection. This is KEY to being out on your own. Example: Summer of 1978. Entire city lost power…there was only 2 delivery points then. There’s 4 points now.

- TVA Wholesale Power Cost
- MLGW spends about $1 billion annually

Integrated Resource Plan /Transmission Analysis Overview – Frank Fletcher

- What is it?
  - A comprehensive roadmap to meet forecasted energy demand using both supply and demand side resources to ensure reliable service to customers in the most cost-effective way
  - Most commonly, 20 year planning horizon, with a detailed implementation plan for the first few years and a required update every two to three years
- Risk and Uncertainties – hard to project what may happen in the future
- Key Processes – Need to follow the key processes to select preferred plan (the optimal electric supply option)
- Why Now?
  - To evaluate the current MLGW-TVA “All-Requirements” Wholesale Power Agreement versus that of entering into the Wholesale Power Market
  - New technologies (i.e. distributed generation) and changing regulatory environments are transforming the current energy mix
  - Resource planning is paramount to ensure utilities can provide least cost and reliable service to their customers

List of Utilities to complete an Integrated Resource Plan in the past 5 years – Frank Fletcher

- Samples of standard studies
  - **Alabama Power:**
    - Most recent IRP 2016
    - IRP conducted every 3 years
  - **Entergy Arkansas:**
    - Most recent IRP 2018
    - IRP conducted every 3 years
  - **Tennessee Valley Authority:**
    - Most recent IRP 2015
    - 2019 IRP currently being conducted

Power Supply Studies vs. Integrated Resource Plan (Transmission Analysis) – Alonzo Weaver

- Existing Supply Studies
- Side-by-side analysis

MLGW Request for Proposal (RFP) Overview – Frank Fletcher

- Deliverables
- RFP Timeline

Next Steps

- Community Stakeholder Engagement meetings – Gale Carson
  - Four community meetings planned in Memphis and Shelby County (open to the public)
- Next Meeting Topics – Frank Fletcher
  - Review information from previous meeting
  - Solicit PSAT team member input
  - TVA Overview – Current & Future State
Wrap Up – J.T. Young & Team
   o Brief review and Q/A opportunity
   o USB Flash Drive
     • Mission, Vision, Values
     • Power Supply Studies/Proposals
     • Updated MLGW Power Supply Advisory Team Presentation 04-16-19
     • Future meeting calendar