

Entergy Arkansas, Inc. Integrated Resource Plan Stakeholder Committee Meeting

July 31, 2012

Today's Agenda

Agenda Item	Presenter	Time
Introduction and Meeting Objectives	Kurt Castleberry	8:30 - 9:00
EAI Resource Planning History	Kurt Castleberry	9:00 - 9:30
EAI Current Capacity Position	Matt Wolf	9:30 -10:00
Break		10:00 - 10:15
EAI's Role in Transmission Planning	Kurt Castleberry	10:15 – 10:30
Overview of Environmental Issues	Myra Glover	10:30 - 11:15
Demand Side Management and Energy Efficiency	Richard Smith	11:15 – 12:00
Lunch		12:00 - 1:00

Today's Agenda (Cont'd)

Agenda Item	Presenter	Time
Generation Technology Assessment & Production Cost Analysis	Charles DeGeorge	1:00 – 2:00
Preliminary Resource Plans	Matt Wolf	2:00 – 2:45
Break		2:45 – 3:00
Stakeholder Committee Formation	Stakeholders	3:00 - 4:00
EAI Respond to Written Stakeholder Questions	EAI	4:00 - 4:45
Wrap-up and Adjourn	Kurt Castleberry	4:45 - 5:00

What is the Purpose and Objective of Today's Meeting?

- Discuss EAI's Integrated Resource Plan process, assumptions, preliminary plans and schedule
- Allow stakeholders an opportunity to organize a committee to develop the Stakeholder's Report

EAI Statistics

Peak Load (2011)	5,178 MW
Retail Sales (2011)	21,583,567 MWh
# Retail Customers (2011 year-end)	695,397
# Active Electric Generating Units	26
# Power Plant Sites	13
Generating Capacity (Summer 2012 Ratings)	
- Nuclear	2,285 MW
- Coal	1,209 MW
- Gas / Oil	1,528 MW
- Hydro	94 MW
Total Capacity (Retail and Wholesale)	5,116 MW
Transmission Lines (miles)	4,744
Distribution Lines (miles)	37,455

What is Integrated Resource Planning?

"....a utility planning process which requires consideration of all reasonable resources for meeting the demand for a utility's product, including those which focus on traditional supply sources and those which focus on conservation and the management of demand."

"The process results in the selection of that portfolio of resources which best meets the identified objectives while balancing the outcome of expected impacts and risks for society over the long run."

- Source: APSC's Resource Planning Guidelines

Who Comprises the Stakeholder Committee and Why Stakeholder Involvement?

The Stakeholder Committee is comprised of:

".....retail and wholesale customers, independent power suppliers, marketers, and other interested entities in the service area."

Why?

"The reason for stakeholder involvement is to open up the planning process and provide an opportunity for others with an interest in the planning process to provide input as a check on the reasoning of a utility during the development of the resource plan."

- Source: APSC's Resource Planning Guidelines

EAI and Stakeholder Committee – Roles and Responsibilities

• EAI will:

- » "organize and facilitate meetings of a Stakeholder Committee for resource planning purposes"
- » "make a good faith effort to properly inform and respond to the Stakeholder Committee"
- » Include a Report of the Stakeholder Committee with EAI's October 2012 Integrated Resource Plan filing

• The Stakeholder Committee:

- » "shall develop their own rules and procedures"
- » "Stakeholders should review utility objectives, assumptions and estimated needs early in the planning cycle"
- » Develop a report of the Stakeholder Committee and provide to EAI

Stakeholder Process Timeline

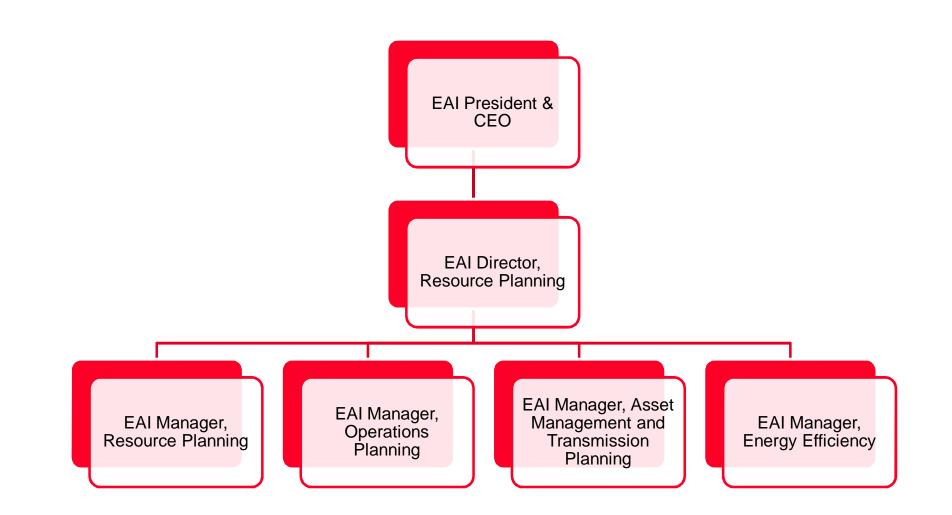
ACTIVITY	DATE
Stakeholder meeting	July 31
Stakeholder / EAI interaction (as needed)	August 1 – September 30
Stakeholders finalize Stakeholder Report and provide to EAI	October 1 – 30
EAI finalizes IRP and files it with the APSC including Stakeholder Report	October 1 - October 31

Ground Rules

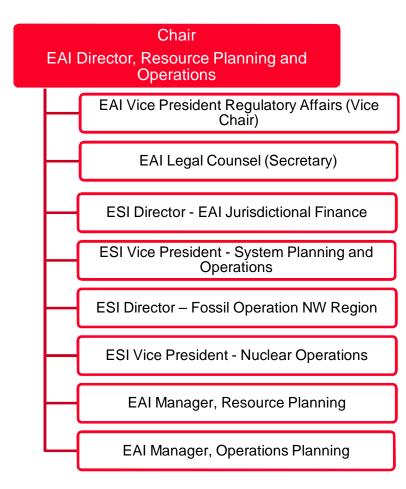
- A lot of material Need to stay on schedule
- Ask questions but time constraints may limit number of questions allowed. However, EAI will answer ALL stakeholder questions either in today's meeting or the questions and their answers will be posted @ <u>http://entergy-</u> <u>arkansas.com/transition_plan/</u>
- Cards are available at each table for written questions. Please use these cards for the more extensive questions. EAI will answer these questions at the end of today's session or will post answers at the above link
- Stay on topic Do not interject questions or comments related to other issues.
- Keep side-bar discussions to a minimum
- EAI will endeavor to respond to questions or get information to Stakeholder Committee members as quickly as is practical

EAI Resource Planning Organization and Governance

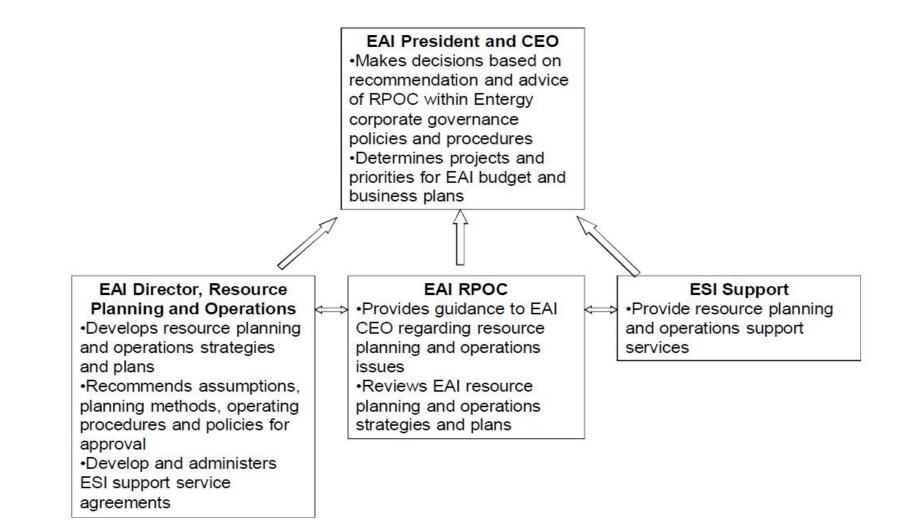
EAI Management Structure with Key Roles for Resource Planning and Operations



EAI Resource Planning and Operations Committee (RPOC)



EAI Resource Planning and Operations Governance



EAI / ESI Support Services Agreement

Services that EAI may continue to utilize from the System Planning and Operations organization may include, but are not limited to:

- 1. Performing load forecasting and technical support for integrated resource planning and operations
- 2. Providing technical support for EAI's transmission service arrangements and evaluation of potential economic transmission upgrades
- 3. Arranging for non-nuclear fuel supplies
- 4. **Providing technical support for generation resource procurement**
- 5. Performing real-time operations for EAI's generation fleet, and operating plans, including planned and maintenance outages for EAI's generation fleet
- 6. Buying and selling capacity and energy on behalf of EAI, including providing administration services for contractual arrangements, and power supply accounting and settlements for power and energy
- 7. Representing EAI in industry and stakeholder committees

EAI has adopted the following resource planning objectives to guide EAI's Integrated Resource Plan (IRP) and to meet requirements of the APSC Resource Planning Guidelines for Electric Utilities:

- 1. <u>Policy Objectives</u> The development of the IRP should reflect policy and planning objectives reviewed by the EAI RPOC and approved by EAI's President and Chief Executive Officer. Those policy and planning objectives will consider and reflect the policy objectives and other requirements provided by EAI's regulators.
- 2. <u>Resource Planning</u> The development of the IRP will consider generation, transmission, and demand-side (e.g., demand response, energy efficiency) options.

- 3. <u>Planning for Uncertainty</u> The development of the IRP will consider scenarios that reflect the inherent unknowns and uncertainties regarding the future operating and regulatory environments applicable to electric supply planning including the potential for changes in statutory requirements.
- 4. <u>Reliability</u> The IRP should provide adequate resources to meet EAI's customer demands and expected contingency events in keeping with established reliability standards.
- 5. <u>Baseload Production Costs</u> The IRP should provide baseload resources that provide stable long-term production costs and low operating costs to serve baseload energy requirements.

- 6. <u>Operational Flexibility for Load Following</u> The IRP should provide efficient, dispatchable, load-following generation and fuel supply resources to serve the operational needs associated with electric system operations and the time-varying load shape levels that are above the baseload supply requirement. Further, the IRP should provide sufficient flexible capability to provide ancillary services such as regulation, contingency and operating reserves, ramping, and voltage support.
- 7. <u>Generation Portfolio Enhancement</u> The IRP should provide a generation portfolio that over time will realize the efficiency and emissions benefits of technology improvements and that avoids an over-reliance on aging resources.
- 8. <u>Price Stability Risk Mitigation</u> The IRP should consider factors contributing to price volatility and should seek to mitigate unreasonable exposure to the price volatility associated with the major uncertainties in fuel and purchased power costs.

- 9. <u>Supply Diversity and Supply Risk Mitigation</u> The IRP should consider and seek to mitigate the risk exposure to major supply disruptions such as outages at a single generation facility or the source of fuel supply.
- 10. <u>Locational Considerations</u> The IRP should consider the uncertainty and risks associated with dependence on remote generation and its location relative to EAI's load so as to enhance the certainty associated with the resource's ability to provide power to EAI's customers.
- 11. <u>Reliance on Long-Term Resources</u> EAI will meet reliability requirements primarily through long-term resources, both owned assets and long-term power purchase agreements. While a reasonable utilization of short-term purchased power is anticipated, the emphasis on long-term resources is to mitigate exposure to supply replacement risks and price volatility, and ensure the availability of resources sufficient to meet long-term reliability and operational needs. Over-reliance on limited-term purchased power (*i.e.*, power purchased for a one to five year term) exposes customers to risk associated with market price volatility and power availability.

12. <u>Sustainable Development</u> – The IRP should be developed consistent with EAI's vision to conduct its business in a manner that is environmentally, socially and economically sustainable.

Questions / Comments