

Item 4.2 Update: Strategic Goals and Supporting Initiatives

Betty Day Vice President, Governance Risk & Compliance

Human Resources and Governance Committee ERCOT Public December 7, 2015

Strategically adapt to changing resource mix

Initiative

Consider redesign of Ancillary Services to ensure ERCOT continues to maintain grid reliability as the ERCOT System and Resource mix continue to evolve: – Filed NPRR667, Ancillary Service Redesign and facilitating workshops to consider stakeholder comments

Tuning short term load forecast.

Generation Resources

Continued integration of intermittent resources:

- Implementing NPRR686, Changing the IRR Forecast from Next 48 Hours to Next 168 Hours into ERCOT systems
- Implementing NPRR615, PVGR Forecasting, to incorporate photovoltaic resource type into ERCOT systems

Developing white paper on Switchable Generation Resources and aligning concepts with Reliability Coordinator agreements

Demand Resources

Drafting an NPRR to better define technical requirements for limited-participation resources (e.g. Private Use Networks that do not offer into SCED)

Working with market to track growth of retail product offerings for dynamic pricing and other retail demand response incentives:

Analyzing responses to price events and shifts in behavior by those reported in Time of Use programs

Distribution Level Resources

Improve participation and modeling of distribution level resources:

- Developed white paper to outline options for distributed energy resource participation in markets
- Participating in task force with stakeholders to develop rules



Provide thought leadership in support of continued improvements to operational reliability and markets

Initiative

Enhance Operational Reliability

- Facilitating transmission planning improvements: Filed PGRR042, Regional Transmission Plan Model Reserve Requirement and Load-Generation Imbalance Methodology, to formalize load-scaling methodology
- Improving understanding of changing system stability requirements resulting from the changing resource mix
- Developing and implementing system strength analysis processes from Short Circuit Ratio study of Panhandle region
- Implementing support for Remote Black Start training

Enhance Outage Scheduling

- Working with stakeholders in the Outage Coordination Task Force to identify high impact outages to more efficiently coordinate their submittal and approval
- Implementing Outage Scheduler improvements via NPRR219, so Resource owners can enter Outages for transmission equipment they own or operate.
- Implementing SCR783, Outage Scheduler Enhancements

Assess Environmental Regulatory Impacts

Conduct studies as appropriate and communicate activities with Stakeholders

Working with PUCT to define sub-synchronous oscillation analysis and protection rules

Evaluate Multi-Interval Real-Time Market (MIRTM)

- Developing requirements and simulator for MIRTM to evaluate potential net benefits
- Issue being raised to the PUCT for discussion

Explore improvements to scarcity pricing during Energy Emergency Alert, Emergency Response Service, Load Resource deployment

- Evaluating changes to Operating Reserve Demand Curve
- Supporting stakeholder discussions to further develop concept of enabling additional Resources to contribute to Real-Time price formation and to expand
 access to the Real-Time Energy Market



Deliver channels and tools to stakeholders for enhanced communication and increased transparency and access

Initiative

Implementing Enterprise Content Alignment Program (ECAP) strategy and roadmap. ECAP projects include:

- ERCOT Identity Completed stakeholder research and began creating messaging framework
- Governance and Taxonomy Define enterprise Information Governance policies and Taxonomy/Metadata framework
- Enterprise Content Management Proof of Concept Define, validate and recommend enterprise content management solution

Improving communication consistency of Grid conditions by improving the reliability and performance of grid communication information technology

Assisting with evaluation of Smart Meter Texas transition options

Developing data services to support Market Participant needs:

- Engaging in market forums to discuss potential changes for external web services strategy
- Implementing MP Online functionality: Automate some manual Generation Interconnection or Change Request (GINR) processes to reduce errors and increase efficiency

Continually enhance our cyber and physical security posture

Initiative
Planning and participating in NERC Grid Ex III 2015 event
Continuing progress on Critical Infrastructure Security Roadmap implementation



Develop ERCOT resources – people and technology

Initiative
Implementing Technology Refresh
Implementing CIPv5 Readiness
Implementing major projects and upgrades: - Network Model Management System (NMMS) - Energy Management System (EMS) - Congestion Revenue Rights (CRR) Framework - Credit Monitoring and Management System (CMM) - Enterprise Resource Management System (HR and Finance) Continuing ERCOT management development: - Evaluating needs and defining strategy - Implementing Manager Development program
Optimizing ERCOT release management and change management procedures and processes
Improving internal access management
Implementing Governance Risk and Compliance system Reviewing ERCOT must/shall/will Protocol and Market Guide requirements and controls

