

## Primary Frequency Response Sr. Task Force (PFRSTF) Operating Committee Update



Glen Boyle Manager, System Operator Training November 7, 2017

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- Last meeting October 27
- Worked on matrix solution options
- PJM presented draft solution proposal
  - Will further refine details
- Next meeting December 1

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- Individual resource capability requirement to provide PFR
  - Droop not to exceed 5%
  - Deadband not to exceed +/- 36 mHz
    - Consistent with Eastern Interconnection
- Plant level Digital Control Systems (outerloop controls)
  - Utilize locally sensed frequency as input in control systems
  - Digital control systems set up to allow unit to provide PFR
- Governor equivalent Mode of Operation
  - Utilize locally sensed frequency as input in control systems
  - Governor equivalent mode of operation must allow unit to provide PFR

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- No "Headroom" or "Footroom" requirement
- Applies to all small and large, new and existing resources
- Exceptions
  - Nuclear generation
  - Documented exception process similar to PLS
- Measured individual unit performance during selected frequency events



- 2 Possible options
  - Cost of Service structure
    - Similar to Reactive Service (OATT Schedule 2)
    - Resource owner files with FERC for cost recovery
  - Capital investment already included in CONE
    - VOM is included in CP offer



- Details of "exception process"
- How to measure individual unit response
- Details of compensation structure
- Handling of PFR during Performance Assessment Hours and regulation assigned hours
- Treatment of DER Resources

- Proposal is a first draft
- PJM working with IMM to come to agreement