



PJM Comments on PFRSTF Solution Packages

Primary Frequency Response
Sr. Task force
September 26, 2018

- Does not address Problem Statement and Issue Charge
- Would codify that PFR for existing units is not required
 - Based on AEP PFR Exemption document
 - FERC Clarification on Order 842, issued 8/24/18, states existing resource must continue to provide Primary Frequency Response in accordance with PJM requirements
- Does not move beyond status quo - may be worse than status quo

- Could directly impact system restoration planning if units don't have PFR capability
 - Difficult to predict where electrical islands may form during a disturbance event
- RFP process for PFR may not address needs during restoration
- Requires study of value of inertia during restoration and envisions complicated substitution rate of products between units providing inertia and those that don't
 - PJM performs dynamic stability analysis as part of Black Start RFP

- Suggests reconvening for different solution if PFR performance drops 10%
 - Based on PJM analysis, this has already occurred
- Cost recovery at FERC may not be best option
 - If similar to OATT Schedule 2 - Reactive Services
 - If FERC rate is not approved, unit would not be obligated to provide PFR.

- Requirements on WMPA units to be addressed at Distributed Energy Resources Subcommittee
- Does require existing units to continue to provide if they have the capability currently; but does not put requirement on all units
- Puts PFR requirement on nuclear units
 - Counter to FERC, NERC and NRC guidance exempting nuclear units

- Requires study of value of inertia during restoration and envisions complicated substitution rate of products between units providing inertia and those that don't
 - PJM performs dynamic stability analysis as part of Black Start RFP
- Proposed “Bilateral market” for PFR is unworkable due to locational issues during system restoration
 - No way to guarantee distribution of PFR capabilities in a system disturbance resulting in electrical islands

- Almost identical to PJM package however, PJM solution package allows for a one-time cost recovery for units requiring upgrades to meet PFR requirements
- PJM could support IMM solution package