



Designated Entity Design Requirements

PC Order 1000 Lessons Learned
May 14, 2015

- For Greenfield projects that are designated as a result of the competitive process, the Designated Entity may follow design standards that differ from those of the zonal transmission owner.
- Questions were raised regarding the potential for introducing a weak point in the system or reducing the reliability by less robust solutions.
- Stakeholders were asked to where consistency is important vs. where individual TO/Developer standards may be acceptable for a competitively-solicited transmission project

Transmission Owner Design Standards

- Greenfield proposals not required to conform to incumbent TO design standards, but must still satisfy reliability criteria
- Acceptable options:
 - FERC Form 715 filed standards
 - Existing PJM TSS-approved standards
 - Developer standards, subject to TSS approval

- Ensure new project does not reduce the performance
- Consideration of physical geography and environment
- Consideration of other local requirements or codes
- Well integrated protection
- Robustness of physical construction
- Emergency Restoration
- Future considerations

- Recommend the development of minimum design standards, which would take into consideration geography, and physical and other local needs (noise level, undergrounding requirements, etc.) of the project. The design standards would apply to projects that are competitively solicited and address the following areas.
 - Transmission Lines
 - Substations
 - System Protection and Control Design and Coordination
- Recommend to explore the development of a common facility ratings methodology in conjunction with but separate from the development of minimum design standards.

- Recommend a stakeholder group be established at direction of the PC to develop these standards.
- The purpose of establishing minimum design standards is to assure a minimum level of robustness is provided such that the new competitively-solicited facility would not introduce a weak point in the system in terms of performance. These minimum design standards would not apply to non-competitive projects.