Designated Entity Design Requirements
Order 1000 Lessons Learned

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Design Requirements for Competitively Solicited Projects

- 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 at PC/TEAC and Lessons Learned regarding the potential for introducing a weak point in the system or reducing the reliability by least robust solutions.

- Stakeholders were asked to consider where consistency is important vs. where individual TO/Developer standards may be acceptable for a competitively-solicited transmission project.
Designated Entity Design Requirements – Concepts previously discussed at PC and Lessons Learned meetings

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
Feedback from Stakeholders

- 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
Recommendation

• 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.
• PJM is seeking approval from the PC on the formation of a Task Force reporting to the PC to develop minimum design standards.
  – The group would be open to all PJM stakeholders

• 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.