Problem Statement

FERC issued a Final Rule on Order No. 1000 in July 2011 and PJM has subsequently submitted a number of compliance filings to establish the process by which the revised planning and cost allocation requirements of the Order are being implemented. PJM has now implemented the process over the course of the last 2 years and, together with the stakeholders, have gained significant experience in managing the competitive planning process contemplated by the Order.

Over that time, it has become apparent to PJM and the stakeholders that a number of issues have arisen in carrying out the process that suggest the need for process improvement to make the process more effective and efficient for both PJM and the stakeholder, while maintaining compliance with the Order. PJM, under the auspices of the Planning Committee, is conducting a number of stakeholder feedback sessions, both at the Planning Committee and at other venues, to gather feedback from the stakeholders as to their suggestions for process improvements.

This Problem Statement is focused on a specific issue that was identified by stakeholders, Engineering Design standards to be used for greenfield projects that are competitively solicited. 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 less robust solutions.

Feedback provided by stakeholders consisted of the following items:

- 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

Based on feedback, PJM recommends 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

PJM also recommends exploring the development of a common facility ratings methodology in conjunction with but separate from the development of minimum design standards.
Order 1000 Lessons Learned – Designated Entity 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.

Issue Source
This issue was identified by the Planning Committee through “lessons learned” review of the implementation of FERC Order 1000 related processes.

Stakeholder Group Assignment
This issue will be assigned to a new Order 1000 DE Standards Task Force, which will report to the Planning Committee.

Key Work Activities
The Order 1000 DE Standards Task Force shall:

1. Develop minimum engineering 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.
   a. Transmission Lines
   b. Substations
   c. System Protection and Control Design and Coordination
2. Seek endorsement of proposed standards from the PJM Planning Committee.

Expected Deliverables
Design Standards

Expected Overall Duration of Work
This expected duration of work is 12-24 months.

Decision-Making Method
Tier 1 consensus (unanimity) on a single proposal is the expected decision-making method for this issue.