NPCC Reliability Assessment Program (NRAP)

Existing NRAP

Consistent with its primary purpose, the Council established, in 1977, the NPCC Reliability Assessment Program (NRAP). This comprehensive program brings together work done by the Council, its members and Areas relevant to the assessment of bulk power system reliability. The NRAP consists of two components:

i) Review and Development of NPCC Criteria, Guidelines and Procedures
ii) Reliability Assessments

This single program addresses both planning and operating requirements.

NPCC has developed a series of documents that define the Criteria, Guidelines and Procedures to be used as the “rules” for meeting NPCC reliability requirements. The six Criteria documents are the fundamental rules that outline the requirements for assuring reliability of the bulk electric power system in the NPCC Region. They cover:

i) Review and Approval of Documents
ii) Design and Operation of the Interconnected Bulk Power System
iii) Emergency Operations
iv) Maintenance for Bulk Power System Protection
v) Bulk Power System Protection
vi) Operating Reserve

These Criteria are supported by twelve Guideline documents and twenty procedure documents. The complete set of NPCC documentation is available from the NPCC web site.

All documentation is reviewed on a regular basis as part of NRAP. Within NPCC, the Task Forces on Coordination of Planning, Coordination of Operations, System Studies, System Protection and Energy Management Technology presently do this review. NPCC implements an Open Process for document development and review which allows parties, both internal and external to NPCC, to provide comments to these documents as they come up for review. This open process is internet-based and can be accessed through the NPCC web site.

The Reliability Assessment component of the program presently consists of some twenty-eight individual assessments that cover all aspects of reliability assurance. These assessments utilize the aforementioned NPCC documentation. Some examples of assessments that are part of NRAP are:

i) Conformance with Emergency Operation Criteria
ii) Triennial Area Review of Resource Adequacy
iii) Area Transmission Review
iv) Minimum Maintenance Conformance