Initial Standard Review and Analysis Report
For
NERC Standard 300 - Balance Resources and Demand

NAESB WEQ Executive Committee
Standards Review Subcommittee
September ~~22~~29, 2003

This initial Standard Review and Analysis Report is intended to provide information for the NAESB Wholesale Electric Quadrant (WEQ) to make informed decisions on the disposition of a proposed standard that impacts the wholesale electric industry. The Standards Review Subcommittee provides this Report as an initial review of a proposed Standard that may impact current or future NAESB Wholesale Electric Quadrant standards. This Report contains no recommendations to develop or propose a NAESB Standard. A White Paper may be developed to propose a NAESB standard if the WEQ finds it necessary.

This **Initial Standard Review and Analysis Report** reviews the following standard(s):

Proposing Organization(s): North American Electric Reliability Council (NERC)

Proposed Standard(s) and date: Standard 300 – Balance Resources and Demand, consisting of the following sections:

- 301 – Balance of Resources and Demand
- 302 – Frequency and Area Control Error
- 303 – Reliability Authority Directives

Description and Background

The objective of this standard is to maintain interconnection scheduled frequency within a predefined frequency profile under both normal and abnormal operating conditions. To accomplish this objective, this standard provides several measures for assessing a Balancing Authority's performance, including control performance, discrete event metric (DEM) and abnormal operations metric (AOM). This standard defines the compliance monitoring process and non-compliance levels for each of these measures. This standard will replace portions of NERC Policy 1, Generation Control and Performance.

This standard will address the following areas:

- the Balancing Authority's (BA) responsibility to control its area control error (ACE)
  - proposed measures of frequency control
    - After the fact long term
      - Control Performance Measure 1 (CPM-1)
      - Control Performance Measure 60 (CPM-60)
    - After the fact intermediate
      - Abnormal Operations Measure (AOM)

        - Discrete Event Metric (DEM)

- the Reliability Authority's (RA) response to frequency deviations not controlled by the BA's under its control
  - Real Time
    - Frequency Relay Limits
    - Frequency Abnormal Limits
    - Frequency Trigger Limits

- the Balancing Authority (BA) response to Reliability Authority (RA) directives
  - actions the BA is expected to take

This is a very "technical" oriented standard. The drafting team has proposed new performance measures for the industry to consider. Some benchmarking will be required. Finally, note that the drafting team has composed four documents (*Introduction to the Balance Resources and Demand Standard, Procedure for Determining Balancing Authority Frequency Bias, Procedure for Determining Interconnection Frequency Limits, and Procedure for Determining Balancing Authority ACE Limits*) in support of this standard that should also be carefully reviewed.

Requirements deal with the relationship between RAs and BAs that are relevant for purposes of balancing resources to loads in real-time for purposes of maintaining frequency. It is unclear to what extent obligations may need to be extended to resources and loads to provide data or perform operations in a manner as required by the standard. (This needs further clarification from NERC)

Potential business practice standards and related impacts

The proposed standard impacts the following NAESB activities/standards:

- Inadvertent Interchange Payback Business Practice

The proposed standard raises the following possible business practice concerns:

- The standard does not provide detail as to the format of the monthly compliance reports or how such reports are to be delivered (e.g. electronically, via first class mail, etc.). Business practices/standards may be useful to make the data submittal process as efficient as possible.
- Business practice standards may be needed to allow for entities to payback inadvertent energy as identified by the NERC measurements. The existing activities of the NAESB Inadvertent Interchange Payback Task Force complements the current NERC CPS1, and CPS2 measurements that establish triggers or limits as to when inadvertent energy may have been ~~exhanged~~exchanged. Such complementary business practices may be required for these new NERC measures.

Notes/Comments regarding NERC-NAESB Coordination

The SRS discussed the possibility of NAESB complementary business practices to support each of the proposed NERC measures. Several concerns were raised regarding the co-existence of NERC and NAESB standards that relate to balancing and system frequency.

- If NAESB will pursue development of complementary business practice standards to these NERC standards, which standard (NERC or NAESB) will establish the valuation "triggers", i.e.- when inadvertent is identified as to have been exchanged.
    - Which organization would be responsible to monitor and house the needed data must also be addressed.

- There was concern that the new NERC compliance (as well as any additional Regional compliance) penalties may be ~~overlayed~~overlaid by ~~payements~~payments for inadvertent energy that may be determined by a NAESB standard business practice.
    - There was also concern that certain measures, specifically DCS, may not have any business practice solutions.
    - Generally, the goal of any NAESB business practice, which may be identified as necessary, should be to provide market ~~particiaptns~~participants with the correct incentives to behave in ways as to avoid violation of NERC ~~requriemsnts~~requirements and their resultant penalties.