

Proposed Convention for Numbering of NERC Reliability Standards

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Introduction

The Version 0 Drafting Team proposes to initiate a new convention for numbering NERC reliability standards concurrent with the approval of the Version 0 standards. This convention would apply to all NERC standards going forward, including standards currently in progress.

Parties submitting comments on Draft 2 of the NERC Version 0 Reliability Standards are requested to comment on this proposal in Question 9 of the [Version 0 Draft 2 Comment Form](#).

Background

When it was first proposed approximately three years ago to move to reliability standards, a transition task force developed the following list as an initial scope of reliability standards and assigned the numbers shown:

- 100 Coordinate Operations
- 200 Operate within Interconnection Reliability Operating Limits
- 300 Balance Resources and Demand
- 400 Coordinate Interchange
- 500 Assess Transmission Future Needs and Develop Transmission Plans
- 600 Determine Facility Ratings, Operating Limits, and Transfer Capabilities
- 700 Define (Physical) Connection Requirements
- 800 Design, Install and Coordinate Control and Protection Systems
- 900 Monitor and Analyze Disturbances, Events and Conditions
- 1000 Prepare for and Respond to Abnormal or Emergency Conditions
- 1100 Prepare for and Respond to Blackout or Island Conditions

Over time, several additional standard areas were proposed:

- 1200 Cyber Security Standard (Urgent Action)
- 1300 Cyber Security Standard (Permanent)
- 1400 Certification of Balancing Authority Function
- 1500 Certification of Interchange Authority Function
- 1600 Certification of Reliability Authority Function
- 1700 Certification of Transmission Operator Function
- 1800 Not Used (temporarily assigned to proposed revision to standards process manual)
- 1900 Transmission System Vegetation Management

This numbering approach currently used for NERC standards appeared to be acceptable with the initially conceived list of standards. However, this approach is not conducive to adding future standards in a logical hierarchy. The approach has also been misapplied, for example, by numbering an interim Cyber Security Standard as 1200 and a proposed permanent standard on the same subject as 1300.

Version 0 Standards

The Version 0 Drafting Team adopted a convention of numbering the Version 0 standards with 001, ultimately using numbers 001 to 040 to translate existing operating policies and 051 to 072 to translate existing planning standards. This decision was an attempt to be consistent with the numbering convention described above, while connoting Version 0 with the use of the '0'. Unfortunately, neither the existing numbering convention nor the Version 0 Drafting Team's use of the 001 to 099 range have left a logical path forward for numbering of standards.

Objectives of Numbering Convention

The objectives for developing a new standards numbering convention are:

- Logically integrate existing standards project, Version 0 and future standards into a single scheme.
- Allow standards to be readily incorporated into a database.
- Use numbering that is easily recognizable and useful to users of the standards.
- Be compatible with numbering used by NAESB for business practices.

Proposed Numbering Convention

The Drafting Team believes it would be simplest to shift to a new numbering convention with the approval of the Version 0 standards. Only one existing standard has been approved, the 1200 Urgent Action Cyber Security Standard, and it is anticipated to be retired by August 2005. All other standards are in draft form and could be renumbered with minimal impact at this time.

The proposed numbering convention has three parts:

- A three-letter acronym denoting the general topical area of the standard.
- The standard number within that topical area, beginning with 1 and increasing sequentially.
- The version of that standard.

Example: BAL-001-1 (Balancing – Standard 001 — Version 1)

Guided by a Functional Model approach for as many standards as possible, the Version 0 Drafting Team proposes the following initial list of topical acronyms:

BAL	Resource and Demand Balancing
INT	Interchange Scheduling and Coordination
TOP	Transmission Operations
VAR	Voltage and Reactive
IRO	Interconnection Reliability Operations and Coordination
EOP	Emergency Preparedness and Operations
TPL	Transmission Planning
MOD	Modeling, Data, and Analysis
PRC	Protection and Control
FAC	Facilities Design, Connections and Maintenance
COM	Communications
CIP	Critical Infrastructure Protection
PER	Personnel Performance, Training, and Qualifications

ORG Organization Certification

New acronyms could be added if additional broad areas are introduced in the future.

Sample Mapping of Proposed Version 0 Standards

A preliminary mapping of the Version 0 standards is shown in Table 1 below.

Table 1 — Mapping of Version 0 Standards to New Numbering Convention

Current Standard Number	Title	Proposed Standard Number
001	Real Power Balancing Control Performance	BAL-001-0
002	Disturbance Control Standard	BAL-002-0
003	Frequency Response and Bias	BAL-003-0
004	Time Error Correction	BAL-004-0
005	Automatic Generation Control	BAL-005-0
006	Inadvertent Interchange	BAL-006-0
010	Interchange Transaction Tagging	INT-001-0
011	Interchange Transaction Tag Communication and Reliability	INT-002-0
012	Interchange Transaction Implementation	INT-003-0
013	Interchange Transaction Modifications	INT-004-0
018	Reliability Responsibilities and Authorities	TOP-001-0
024	Normal Operations Planning	TOP-002-0
016	Planned Outage Coordination	TOP-003-0
007	Transmission Security	TOP-004-0
015	Operational Reliability Information	TOP-005-0
014	Monitoring System Conditions	TOP-006-0
008	Reporting SOL and IROL Violations	TOP-007-0
021	Response to Transmission Limit Violations	TOP-008-0
009	Voltage and Reactive Control	VAR-001-0
064	Voltage Support and Reactive Power	VAR-002-0
033	Reliability Coordination - Responsibilities, Authorities	IRO-001-0
034	Reliability Coordination - Facilities	IRO-002-0
035	Reliability Coordination - Wide Area View	IRO-003-0
037	Reliability Coordination - Operations Planning	IRO-004-0
038	Reliability Coordination - Current Day Operations	IRO-005-0
039	Reliability Coordination - Transmission Loading Relief	IRO-006-0
025	Emergency Operations Planning	EOP-001-0
020	Capacity and Energy Emergencies	EOP-002-0
026	Load Shedding Plans	EOP-003-0
022	Disturbance Reporting	EOP-004-0
027	System Restoration Plans	EOP-005-0
040	Reliability Coordination - System Restoration	EOP-006-0
070	System Blackstart Capability	EOP-007-0

028	Plans for Loss of Control Center Functionality	EOP-008-0
051	Transmission System Adequacy and Security	TPL-001-0
052	System Adequacy and Security Reliability Assessment	TPL-002-0
054	TTC/ATC Methods and Calculations	MOD-001-0
055	CBM Methods and Calculations	MOD-002-0
056	TRM Methods and Calculations	MOD-003-0
058	Steady State and Dynamic Modeling	MOD-004-0
059	System Modeling Data Requirements - Generation	MOD-005-0
061	Actual and Forecast Demands	MOD-006-0
062	Load Models for System Dynamics Studies	MOD-007-0
017	System Protection Coordination	PRC-001-0
057	Disturbance Monitoring Equipment	PRC-002-0
063	Transmission Protection System	PRC-003-0
065	Generation Control and Protection	PRC-004-0
066	Transmission System Control Devices	PRC-005-0
067	Underfrequency Load Shedding	PRC-006-0
068	Undervoltage Load Shedding	PRC-007-0
069	Special Protection Systems	PRC-008-0
071	Automatic Restoration of Load	PRC-009-0
053	Facility Connection Requirements	FAC-001-0
060	Facility Ratings	FAC-002-0
072	Vegetation Management Program	FAC-003-0
029	Telecommunications	COM-001-0
019	Communications and Coordination	COM-002-0
023	Sabotage Reporting	CIP-001-0
030	Operating Personnel Responsibility and Authority	PER-001-0
031	Operating Personnel Training	PER-002-0
032	Operating Personnel Credentials	PER-003-0
036	Reliability Coordination - Staffing	PER-004-0

Version 1 standards currently under development would also be renumbered to fit within this scheme, with a preliminary mapping shown in Table 2 below.

Table 2 — Mapping of Existing Version 1 Standards to New Numbering Convention

Current Standard Number	Title	Proposed Standard Number
100	Coordinate Operations	TOP-nnn-1
200	Operate within Interconnection Reliability Operating Limits	IRO-nnn-1
300	Balance Resources and Demand	BAL-nnn-1
400	Coordinate Interchange	INT-nnn-1
500	Assess Transmission Future Needs and Develop Transmission Plans	TPL-nnn-1
600	Determine Facility Ratings, Operating Limits, & Transfer Capabilities	FAC-nnn-1
700	Define (Physical) Connection Requirements	FAC-nnn-1
800	Design, Install and Coordinate Control and Protection Systems	PRC-nnn-1
900	Monitor and Analyze Disturbances, Events and Conditions	EOP-nnn-1
1000	Prepare for and Respond to Abnormal or Emergency Conditions	EOP-nnn-1
1100	Prepare for and Respond to Blackout or Island Conditions	EOP-nnn-1
1200	Cyber Security Standard (Urgent Action)	To Retire
1300	Cyber Security Standard (Permanent)	CIP-nnn-1
1400	Certification of Balancing Authority Function	ORG-nnn-1
1500	Certification of Interchange Authority Function	ORG-nnn-1
1600	Certification of Reliability Authority Function	ORG-nnn-1
1700	Certification of Transmission Operator Function	ORG-nnn-1
1900	Transmission System Vegetation Management	FAC-nnn-1