

Implementation Plan For Project 2007-03: Real-Time Operations

Prerequisite Approvals

Changes made in this project to TOP-001-2, R3; TOP-002-3, R16, R17; TOP-005-1, R1; TOP-006-1, R1 are dependent on corresponding changes being approved in Project Pre-2006, Operate within Interconnection Reliability Operating Limits:

- IRO-008-1: Reliability Coordinator Operational Analyses and Real-Time Assessments
- IRO-009-1: Reliability Coordinator Actions to Operate Within IROLs
- IRO-010-1: Reliability Coordinator Data Specification and Collection

Changes made in this project to TOP-005-1, R1; TOP-007-0, R4 are dependent on corresponding changes being approved in Project 2006-06, Reliability Coordination:

- COM-001-1: Telecommunications
- COM-002-2: Communications and Coordination
- IRO-001-1: Reliability Coordination – Responsibilities and Authorities
- IRO-002-1: Reliability Coordination – Facilities
- IRO-014-1: Procedures to Support Coordination between Reliability Coordinators
- IRO-015-1: Notifications and Information Exchange between Reliability Coordinators
- IRO-016-1: Coordination of Real-Time Activities between Reliability Coordinators
- PER-004-1: Reliability Coordination – Staffing
- PRC-001-1: System Protection Coordination

Changes made in this project to TOP-002-3, R12 are dependent on corresponding changes being approved in Project 2006-07, ATC/TTC/AFC and CBM/TRM Revisions:

- MOD-001-1: Available Transmission System Capability
- MOD-008-1: TRM Calculation Methodology
- MOD-028-1: Area Interchange Methodology
- MOD-029-1: Rated System Path Methodology
- MOD-030-1: Flowgate Methodology

Revision to Sections of Approved Standards and Definitions

There is one new definition in the proposed set of standards.

Simulated Contingencies – The act of using planning and operating models to replicate Contingency responses that depict the net effect of design considerations.

A mapping table showing the disposition of existing requirements in the affected standards is shown below.

Existing Requirement	New Location
TOP-001-2 (redline version)	
R1	Deleted – The SDT does not feel that this requirement is needed in a reliability standard. Other standards already require the necessary actions. If this statement was intended to protect the operator from liability, it doesn't provide any real protection.
R2	Deleted – The SDT feels that dictating 'immediate action' could be detrimental to reliability.
R3 (re-formatted to R1)	All references to the RC and RC responsibilities have been removed from TOP standards as they are now covered in the revisions being undertaken in Project 2006-06. .
R4	The DP & LSE have been moved into the new R1 in the revised standard.
R5 (re-formatted to R2)	The added phrasing was adapted from TOP-008-0, R3. Deletions were made due to redundancies with TOP-004-3, R1.
R6 (re-formatted to R3)	Retained with changes.
R7 (re-formatted to R4)	Retained and expanded to incorporate sub-requirements.
R7.1 – R7.3	The sub-requirements have been moved into the main requirement in the revised standard.
R8	The first sentence has been deleted due to redundancies with CPS, DCS, and VAR standards. The requirement for real power in the second sentence was deleted as redundant with EOP-002-2, R1 & R6. The requirement in the second sentence for reactive power was deleted since you can't supply emergency reactive assistance remotely.
new R5	This requirement was moved here from TOP-007-0, R1.
new R6	This requirement was moved here from TOP-007-0, R2.
new R7	This requirement was moved from TOP-008, R2.
TOP-002-3 (redline version)	
R1	Deleted as BA only needs to respond to CPS and DCS and thus was not applicable. TOP now covered in new R1 below.
R2	Deleted as good utility practice but unmeasurable.
R3	LSE and GOP are governed by their Interconnection Operating Agreements and therefore not necessary here. TSP deleted as not applicable. TOP covered in new R3.
R4	Deleted as duplicative of proposed IRO-001-2, R1.
R5	Replaced by new R1.
R6	BA deleted as covered in BAL-002-0, R4. TOP covered in new R1.
R7	Deleted as duplicative of BAL-002-0, R1.
R8	Delete as not applicable to BA.
R9	Delete as duplicated in BAL-001 and BAL-002.
R10	Delete as not applicable to BA. TOP covered in new R2.
R11	First sentence covered in new R1. Second sentence deleted as this is now covered in proposed IRO-009-1 as well as FAC-010-1, FAC-011-1, and FAC-014-1. Third sentence covered in new R3.
R12	Deleted as now covered in MOD standards as part of Project 2006-07.

R13	Deleted as verification upon request not seen as needed by this standard. Passed on to Generator Verification team. Data now part of revised TOP-003-1 data specification requirements.
R14	Data now part of revised TOP-003-1 data specification requirements.
R15	Deleted as duplicative of IRO-010-1, R3. Data now part of revised TOP-003-1 data specification requirements.
R16	Data now part of revised TOP-003-1 data specification requirements.
R17	Deleted as duplicative of IRO-010-1, R3.
R18	Deleted as the SDT feels that this is a 'how' as opposed to a 'what'.
R19	Deleted as unmeasurable.
new R1, R2, & R3	New.
TOP-003-1 (redline version)	
R1	This requirement is now covered in the re-worded requirements below for the data specification.
R2	Deleted as now covered in IRO-001-2, R1 (proposed).
R3	Deleted as now covered in IRO-001-2, R1 (proposed).
R4	Deleted as now covered in Project 2006-06.
R1 through R5 (re-formatted)	New data specification requirements.
TOP-004-3 (redline version)	
R1	Retained with changes.
R2	This is now covered by R1 with the inclusion of IROL and IROL T_v .
R3	This is now covered by R1 with the inclusion of IROL and IROL T_v .
R4	Deleted as unmeasurable.
R5	The first sentence was deleted as unmeasurable. The second sentence was deleted as it is covered by TOP-001-1, R1 & R4.
R6	The first sentence was deleted as it is good utility practice. The second sentence was deleted as all of the sub-requirements were deleted: R6.1 as duplicative of FAC-008 & FAC-009; R6.2 as duplicative of VAR-001-1, R1 for voltage levels and reactive power and real power by R10; R6.3 as it is now covered in new R2; R6.4 as now covered in TOP-002-3, R2.
new R2 (re-formatted)	Rewording of previous requirement.
TOP-005-1 (redline version)	
R1	Deleted – covered by IRO-010-1, R3.
R1.1	Deleted – covered in IRO-010.
R2	Deleted – The SDT did not feel that this was a legitimate reliability concern.
R3	Deleted – now covered as part of the new data specification requirements in TOP-003-1.
R4	Deleted – the PSE does not have any unique information needed by the TOP or BA.

TOP-006-1 (redline version)	
R1	Delete – now covered as part of the new data specification requirements in TOP-003-1.
R1.1	Delete – now covered as part of the new data specification requirements in TOP-003-1.
R1.2	Delete – now covered in IRO-010-1, R3.
R2	Delete – now covered as part of the new data specification requirements in TOP-003-1..
R3	Delete – now covered in PRC-001-1, R1.
R4	Deleted – now covered as part of the new data specification requirements in TOP-003-1.
R5	Delete – covered in certification process and no longer required in standards.
R6	Delete – covered in certification process and no longer required in standards.
R7	Delete – RC handled in IRO standards. TOP & BA now covered in certification process and no longer required in standards.
TOP-007-0 (redline version)	
R1	Moved to TOP-001-2, R5 (redlined version).
R2	Moved to TOP-001-2, R6 (redlined version).
R3	This authority already exists and does not need to be cited in a requirement. .
R4	Delete as this is now covered in the IROL Project.
TOP-008-0 (redline version)	
R1	Deleted – now covered by TOP-001-2, R6 for IROL. Taking immediate steps for relief of all SOLs experienced or contributed to may not always be prudent, especially if other organizations are addressing the cause. In such cases, uncoordinated immediate actions may be counterproductive. Accordingly, requiring immediate action to relieve all SOLs was deleted in consideration of TOP-001-1 and TOP-004-3 requirements applied in combination.
R2	First sentence replaced by TOP-004-3, R1. Second sentence moved to TOP-001-2, R7 (redlined versions).
R3	Delete first sentence – bad operating practice, actually eliminates operator flexibility and thus increases risk to the System. Delete second sentence as duplicative of IRO-009-1 as well as FAC-010-1, FAC-011-1, and FAC-014-1. Some phrasing moved to TOP-001-2, R2.
R4	Delete – now covered as part of the new data specification requirements in TOP-003-1.
PER-001-0 (redline version)	
R1	Deleted - This statement is not needed in a reliability standard. The standards already require the necessary actions.

Compliance with Standard

Standard	Functions that must Comply with the Associated Requirements							
	TOP	BA	GO	GOP	IA	LSE	DSP	TO
PER-001-0: Operating Personnel Responsibility and Authority	Retired							
TOP-001-2: Coordination of Transmission Operations	X	X		X		X	X	
TOP-002-3: Operations Planning	X							
TOP-003-1: Operational Reliability Data	X	X	X	X	X	X		X
TOP-004-2: Real-Time Transmission Operations	X							
TOP-005-2: Operational Reliability Data	Retired							
TOP-006-1: Monitoring System Conditions	Retired							
TOP-007-0: Reporting System Operating Limits (SOL) and Interconnection Reliability Operating Limit (IROL) Violations	Retired							
TOP-008-0: Response to Transmission Limit Violations	Retired							

The effective date is the date entities are expected to meet the performance identified in these standards. Note that entities have been given several months beyond the regulatory approval date (preparation time) to fully comply with new requirements.

The assumption used by the SDT in establishing this Implementation Plan is that the projects mentioned in the prerequisites: Pre-2006, Operate within Interconnection Reliability Operating Limits; 2006-06, Reliability Coordination; and Project 2006-07, ATC/TTC/AFC and CBM/TRM Revisions have been approved prior to the implementation of this Project 2007-03, Real-Time Operations.

Effective Date of Revised Standards

All requirements will become effective the first day of the first calendar quarter twenty-four months following applicable regulatory approval. In those jurisdictions where no regulatory approval is required, the requirements become effective the first day of the first calendar quarter twenty-four months following Board of Trustees adoption.

Retirement Date for Existing Standards

All requirements will be retired twenty-four months following the first day of the first quarter following regulatory approval.