Implementation Plan Contents:

Background Information:

The set of Phase III & IV Standards was subdivided into two smaller sets of standards. The standards that are in Set One include those in the following table. As noted in the table, the standards are in various stages of development; some are ready for stakeholder ballot; some need additional stakeholder feedback before going to ballot; some must be field tested to see if additional modifications are needed.

Standard Number and Name	Ballot	Seek More Comments	Field Test
MOD - 024 Verification of Generator Gross and Net Real Power Capability	X		
MOD - 025 Verification of Generator Gross and Net Reactive Power Capability	X		
PRC - 002 Define Regional Disturbance Monitoring and Reporting Requirements		X	
PRC - 003 Regional Procedure for Analysis of Misoperations of Transmission and Generation Protection Systems	X		
PRC - 004 Analysis and Mitigation of Transmission and Generation Protection System Misoperations	X		
PRC - 005 Transmission and Generation Protection System Maintenance and Testing	X		
PRC - 018 Disturbance Monitoring Equipment Installation and Data Reporting		X	
PRC - 019 Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection			X
PRC - 020 Under Voltage Load Shedding Program Database	X		
PRC - 021 Under Voltage Load Shedding Program Data	X		
PRC - 022 Under Voltage Load Shedding Program Performance	X		
PRC - 024 Generators Performance during Frequency and Voltage Excursions			X

Prerequisite Approvals

There are no other Reliability Standards or Standard Authorization Requests (SARs), in progress or approved, that must be implemented before the Phase III & IV Standards being presented for ballot can be implemented. (MOD-024, MOD-025, PRC-003, PRC-004, PRC-005, PRC-020, PRC-021, PRC-022)

Proposed Effective Dates

The following tables show the proposed effective dates for the standards in Set One of Phase III & IV Standards. For standards that are moving forward to ballot, the effective date is contingent on approval of the reliability standards by a vote of the ballot pool in January. The effective date is also contingent on adoption of these Standards by the NERC Board of Trustees. The Board will approve the final effective date when it adopts the standards for implementation.

The following standards (MOD-024 and MOD-025) are to be balloted together with a single ballot. Although there are no inter-dependencies with these standards, there are many similarities between these standards and it may be easier to implement these at the same time.

Standard	Proposed Effective Date	Reason for Delay in Implementation
MOD-024 Verification of Generator Gross and Net Real Power Capability	4/1/2006 for RRO requirements By 1/1/2007, Generator Owners must begin to provide verified data according to the schedule set forth by the RRO.	Time needed for RRO to complete & distribute its procedures before GOW can become compliant
MOD-025 Verification of Reactive Power Capability	1/1/2007 for RRO requirements By 1/1/2008, Generator Owners must begin to provide verified data according to the schedule set forth by the RRO.	Time needed for RRO to complete & distribute its procedures before GOW can become compliant

The following standards (PRC-003, PRC-004 and PRC-005) will be balloted together with a single ballot. These standards are inter-dependent; there is no way to enforce PRC-004 unless PRC-003 is also enforced. PRC-005 is addressing the same subset of Protection Systems as is addressed in PRC-003 and PRC-004 and although this could be balloted independently, we've been discouraged from balloting standards independently.

Standard	Proposed Effective Date	Reason for Delay in Implementation
PRC-003 Regional Requirements for Transmission and Generation Protection System Misoperations	5/1/2006	Time needed to formalize documentation
PRC-004 Analysis and Mitigation of Transmission and Generation Protection System Misoperations	8/1/2006	Time needed to respond to Regional requirements for analysis of misoperations
PRC-005 Transmission and Generation Protection System Maintenance and Testing	5/1/2006	Time needed to respond to Regional requirements for maintenance and testing

The following standards (PRC-020, PRC-021 and PRC-022) are to be balloted together with a single ballot. The first two of these standards are inter-dependent; there is no way to enforce PRC-021 unless PRC-020 is also enforced. PRC-022 is addressing the same subset of UVLS programs as is addressed in PRC-020 and PRC-021 and although this could be balloted independently, we've been discouraged from balloting standards independently.

Standard	Proposed Effective Date	Reason for Delay in Implementation
PRC-020 Under-Voltage Load Shedding Program Database	5/1/2006	Time needed to formalize documentation
PRC-021 Under-Voltage Load Shedding Program Data	8/1/2006	Time needed to respond to Regional requirements for the database
PRC-022 Under-Voltage Load Shedding Program Performance	5/1/2006	Time needed to prepare to run simulations, to establish a format for reports and mitigation plans

The following standards are to be posted for an additional comment period and the implementation plan may be revised based on the comments received.

Standard	Proposed Effective Date	Reason for Delay in Implementation
PRC-002 Define Regional Disturbance Monitoring and Reporting Requirements	1/1/2007	Time needed to run studies to determine where to locate Disturbance Monitoring Equipment and to formalize documentation of reporting requirements
PRC-018 Disturbance Monitoring Equipment Installation and Data Reporting	10/1/2007 for R2-R5 Compliance with R1: 25% compliant by 4/1/2008 50% compliant by 4/1/2009 75% compliant by 4/1/2010 100% compliant by 4/1/2011	R1 – Time needed to purchase and install DMEs phased in so that Generator Owners can take up to four years to install the DMEs R2 through R5 – Time needed to compile data on DMEs and to establish maintenance and testing programs

The following standards will be field tested and their implementation plans may change based on the field test results.

Standard	Proposed Effective Date	Reason for Delay in Implementation
PRC-019 Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection	To be determined: R1 - One year beyond Board of Trustee adoption R2, R3 - Two years beyond Board of Trustee adoption 1st 20% compliant R2, R3 - Three years beyond Board of Trustee adoption 2nd 20% compliant R2, R3 - Four years beyond Board of Trustee adoption 3rd 20% compliant R2, R3 - Five years beyond Board of Trustee adoption 4th 20% compliant R2, R3 - Six years beyond Board of Trustee adoption 5th 20% compliant	R1 – Time needed for RRO to identify generator exemption criteria R2, R3 – Time needed to produce documentation phased in so that Generator Owners can take up to 5 years to become fully compliant
PRC-024 Generator Performance During Temporary Frequency and Voltage Excursions	To be determined: R1 through R6 – One year beyond Board of Trustee adoption R7 – Two years beyond Board of Trustee adoption	Time needed for RRO to complete & distribute its procedures before facility owners can become compliant

Applicable Functions:

The standards in Set One of Phase III & IV have requirements for the following Functions:

Standard	Requirement	Functions That Must Comply			
		RRO	**Gen Owner**	**Trans Owner**	**Dist Provider**
MOD-024 Verification of Generator Gross and Net Real Power Capability	R1	X			
	R2	X			
	R3		X		
MOD-025 Verification of Reactive Power Capability	R1	X			
	R2	X			
	R3		X		
PRC-003 Regional Requirements for Transmission and Generation Protection System Misoperations	R1	X			
	R2	X			
	R3	X			
PRC-004 Analysis and Mitigation of Transmission and Generation Protection System Misoperations	R1			X	X[1]
	R2		X		
	R3		X	X	X[1]

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[1] That owns a Transmission Protection System

Standard	Requirement	Functions That Must Comply					
		RRO	Gen Owner	Trans Owner	Trans Op	Dist Provider	LSE
PRC-005 Transmission and Generation Protection System Maintenance and Testing	R1		X	X		X^2	
	R2		X	X		X^2	
PRC-020 Under-Voltage Load Shedding Program Database	R1	X^3					
	R2	X^3					
PRC-021 Under-Voltage Load Shedding Program Data	R1			X^4		X^4	
	R2			X^4		X^4	
PRC-022 Under-Voltage Load Shedding Program Performance	R1				X^5	X^5	X^5
	R2				X^5	X^5	X^5
PRC-002 Define Regional Disturbance Monitoring and Reporting Requirements	R1	X					
	R2	X					
	R3	X					
	R4	X					
	R5	X					
	R6	X					
	R7	X					
	R8	X					

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[2] That owns a Transmission Protection System
[3] With entities that own or operate a UVLS program
[4] That owns a UVLS program
[5] That operates a UVLS program

Standard	Requirement	Functions That Must Comply			
		RRO	**Gen Owner**	**Trans Owner**	**Dist Provider**
PRC-018 Disturbance Monitoring Equipment Installation and Data Reporting	R1		X	X	
	R2		X	X	
	R3		X	X	
	R4		X	X	
	R5		X	X	
PRC-019 Coordination of Generator Voltage Regulator Controls with Unit Capabilities and Protection	R1	X			
	R2		X		
	R3		X		
PRC-024 Generator Performance During Temporary Frequency and Voltage Excursions	R1	X			
	R2	X			
	R3	X			
	R4	X			
	R5	X			
	R6	X			
	R7		X	X	

November 11, 2005