Comment Form — 1st Draft of SAR for System Restoration and Blackstart

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs, ISOs,
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: Midwest ISO and Collaborating Stakeholders

Lead Contact: **Terry Bilke**

Contact Organization: **Midwest ISO**

Contact Segment: **2**

Contact Telephone: **317-249-5463**

Contact E-mail: **tbilke@midwestiso.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Roderick Conwell	**IPL**	**RFC**	**1**
Jim Cyrulewski	**JDRJC Associates**		**8**

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

This project involves upgrading the requirements in these four standards:

EOP-005 — System Restoration Plans
EOP-006 — Reliability Coordination - System Restoration
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EOP-009 — Documentation of Blackstart Generating Unit Test Results

There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

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EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: We agree that the restoration-related standards need improvement.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: TThe scope should be more focused. Right now it looks like a laundry-list.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: This does not appear to be a yes-no question and may be an indication of the haste in putting this together. There are some good things mentioned in the SAR (better training, involvement of LSEs and Generators, etc.), but it appears this may well get out of control. The intent is to prepare for restoration, not to add scores of administrative requirements. We are concerned about the suggestion to have "blackstart agreements " and "cranking path agreements". Since we don't know how an event will evolve or propogate, restoration plans should be heavy on philosophy, simple to manage once implemented, and not overly prescriptive in detail. It appears this is going down a path to create a reference that will be used to second-guess operators after the fact when conditions require deviation from their plan.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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E-mail:	wrankin1@txued.com or tbesier1@txued.com	
NERC Region		**Registered Ballot Body Segment**
☒ **ERCOT**	☒	1 — Transmission Owners
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Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Martin Trence	
Organization:	Xcel Energy - Northern States Power	
Telephone:	(612) - 337 - 2152	
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NERC Region		**Registered Ballot Body Segment**
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1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: The structure of these and a few additional standards need to be revised to reflect a more realistic approach to planning, real-time execution, and measurable compliance to system restoration standards

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: It is questionable if the concept of a "Regional Restoration Plan" should remain in existence as the responsibility of implementing restoration plans lie with the Transmission Operator, Balancing Authority, Generator Operator (where appplicable), and Reliability Coordinator. A Regional Reliability Organization is not structured to implement system restoration plans, their function has evolved for the most part to set standards and perform in conjunction with the ERO compliance monitoring. There are also critical utility infrastructure issues that need to be addressed in the sharing of restoration plans.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments: Additional Standards that make reference to System Restoration Plans (e.g. EOP-001) should be reviewed and such references be removed from those standards as they are redundant, distracting, and provide no additional support to these standards being addressed in this SAR.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Will Franklin	
Organization:	Entergy Services, Inc. - System Planning & Operations	
Telephone:	281-297-3594	
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NERC Region		**Registered Ballot Body Segment**
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   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments:

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   ☐ Yes

   ☐ No

   Comments:
   EOP-005 -?
   Should version 1 be the version subject to review and update?
   R1 - is the "loss of vital communications" necessary? This seems redundant to COM-001
   R2 - the comment about correcting deficiencies during simulation exercises seems out of place.
   R3 - how is "coordination" defined?
   R10 & 10.1 - does this include testing of the generators as specified in EOP-009? Is it the same? Need clarification on this.
   VRFs need to be revisited. The proposed VRFs on the current ballot for thie Standards have administrative tasks rated as HIGH.

   EOP-007-0
   This standard contain requirements for a BCP that outlines blackstart unit testing requirements. Blackstart unit testing requirements should not be spread across several EOPs. Consolidate, Consider merging EOP-007 and 009, and the blackstart unit testing portions of EOP-005.

   EOP-009-0
   See comments above.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Anita Lee	
Organization:	Alberta Electric System Operator (AESO)	
Telephone:	403 539 2479	
E-mail:	anita.lee@aeso.ca	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☒ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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   Comments:

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   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments: The AESO recommends the following revisions to be incorporated:

   1. The SAR should refer to the most updated and current statndards. Let's say EOP-005-1 and EOP-006-1 and not EOP-005-0 and EOP-006-0
   2. Considering adding definitions to EOP-005-1 for:
   - Partial or total shut down;
   - Vital telecommunications chanels;
   - System restoration;
   - Blackstart capability plan; and
   - System restoration plan.
   3. Consider adding a requirement for Generator Operators to have generating facilities blackstart procedures. Those procedures shall be coordinated with the Transmission Operator's System Restoration plan
   4. Consider revising trainning in R6. Training requirements should be quoted as stated and required in a different standard, let's say PRC. And with regards to training, it shall be state "what" should be the minimum training required for TO, BA and Generating facilities. And also, clarification as "what" is expected as "simulated exercises". What are those? It is DTS what is required? Or is it a table top adequated?
   5. Consider defining what is as a minimum the required criteria for "simulated exercises" in the understanding that it will not be practical to perform "an actual test"

to the entire restoration plan. Further more, What is the meaning for simulation ? DTS? Power flows? EMTP? Other?
6. Consider revising EOP-005-1 R9 "switching requirements" and trying not to be prescriptive in telling the "hows" instead of the "what" is required to comply with. The requirement shold no be a "cook book". If considering keeping this requirement, then consider defining "switching requirements".
7. Consider revising EOP-005-1 R10 in order to clarify "simulation testing"

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Brian Thumm	
Organization:	ITC Transmission	
Telephone:	248-374-7846	
E-mail:	bthumm@itctransco.com	
NERC Region		**Registered Ballot Body Segment**
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1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☐ Yes

   ☒ No

   Comments: Many of the items in the "To Do" lists appear administrative in nature, and not necessarily rooted in a reliability need. The requirements could use some upgrading, yes, but the need does not appear to be purely reliability-related.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: The scope of the SAR for EOP-006, 007, and 009 are overly vague. The scope of the SAR is indiscernable. The scope of the SAR for EOP-005 appears to desire industry debate on several topics more than it desires to actually upgrade a standard.

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E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
	☐	2 — RTOs, ISOs,
	☐	3 — Load-serving Entities
	☐	4 — Transmission-dependent Utilities
	☐	5 — Electric Generators
	☐	6 — Electricity Brokers, Aggregators, and Marketers
	☐	7 — Large Electricity End Users
	☐	8 — Small Electricity End Users
	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name: IRC Standards Review Committee

Lead Contact: **Charles Yeung**

Contact Organization: **SPP**

Contact Segment: **2**

Contact Telephone: **832-724-6142**

Contact E-mail: **cyeung@spp.org**

Additional Member Name	Additional Member Organization	Region*	Segment*
Tom Bowe	PJM	RFC	2
Mike Calimano	NYISO	NPCC	2
Ron Falsetti	IESO	NPCC	2
Matt Goldberg	ISO-NE	NPCC	2
Brent Kingsford	CAISO	WECC	2
Anita Lee	AESO	WECC	2
Steve Myers	ERCOT	ERCOT	2
Bill Phillips	MISO	RFC	2

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

This project involves upgrading the requirements in these four standards:

EOP-005 — System Restoration Plans
EOP-006 — Reliability Coordination - System Restoration
EOP-007 — Establish, Maintain, and Document a Regional Blackstart Capability Plan
EOP-009 — Documentation of Blackstart Generating Unit Test Results

There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☒ No

   Comments: The SRC would suggest that the SAR be clear that it will be a complete review of the subject requirements: to include the addition, deletion and modification of requirements as agreed to by public consensus and not be limited to the "TO DO LIST" identified in this draft.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: The SRC agrees that there is a need to review, upgrade and revise the Restoration and Blackstart set of standards. However, the SRC would also recommend the SAR be rewritten to clearly describe the scope of process being proposed.

   At a minimum, the SAR should identify which standards will be under review: the version 0 or version 1 standards. It is unclear if and why EOP-005-0 and EOP-006-0 would be reviewed rather than EOP-005-1 and EOP-006-1.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	David Kiguel	
Organization:	Hydro One Networks Inc.	
Telephone:	416-345-5313	
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NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments: In EOP-5, Compliance, Section 1.4.1 -Hydro One requests clarification of the phrase "critical load requirements".
   The phase can be interpreted as:
   (i) available and easily accessible loads to be restored for voltage control in network restoration on the bulk power system level. These are loads employed to expedite the restoration of the interconnection.
   (ii) loads of importance to health/safety/national security - police, hospitals, govt. offices. These are really distribution loads that are restored once the interconnection is restored and the transmission system is rebuilt.
   (iii) restoring off-site power to key transmission facilities.

   We suggest that mention of critical loads should be replaced by the restoration of critical transmission and generation facilities necessary to restore load.

   With regard to the Phase III/IV comments on EOP-005 Restoration Plans:

   (1) Locking the restoration to single, contractual cranking path.

A robust restoration plan must be flexible. It is impossible to define in advance what equipment will be available for service in the aftermath of a system collapse.

The concept of an explicitly defined cranking path, locked into a restoration plan by contractual requirements, precludes flexibility and is restrictive-further complicating what may be an intricate process. Identifying and communicating and coordinating the intended cranking path is a valid aspect of restoration. This is included in the second bullet of the Phase III/IV comments. The fourth bullet of the Phase III/IV comments should be removed from the SAR.

2) R3- Placing emphasis on restoring local transmission.

There is no need for the bullet on R3. The recommendation as noted encourages the restoration of local transmission and load at a higher priority than reestablishing the interconnection. Restoring the interconnection is the highest priority. In the process of achieving that end, some, minimal restoration of local transmission will be involved.

This is in direct conflict with the industry comments on V0 Standards which requires modifications to assign priority to the integrity of the interconnection.

Changing the emphasis of R3 should be removed from the SAR.

3) R11.5- Placing local load restoration above re-establishing the interconnection.

This follows the same argument addressed above. Restoration of the interconnection is a higher priority that the restoration of local load.

R11.5 should be retained in the SAR.

R6 mentions provideing training requirements however this training requirement is already in PER-002-R3.1. There is also a training requirement in PER-004 R4 for the RC requirement.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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Organization:	Midwest ISO Emergency Prepardness and System Restoration Working Group	
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NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☒ **MRO** ☐ **NPCC** ☒ **RFC** ☒ **SERC** ☒ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: The scope of this project should not be limited to just revising four Standards due to directives from regulatory bodies, but should be flexible to meet industry needs, whether additional or fewer Standards are required to address System Restoration and Blackstart needs. Review and modification of other existing Standards may be required (e.g.EOP-001).

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments: Regional Reliability Organizations (RRO's) do not have an active role in Emergency Operations, the applicability of EOP - 007 for RRO's is questionable. The requirements in EOP-007 should be applicable to the Reliability Coordinator function as it has the responsibility of maintaining integrity of the Bulk Electric System over a wide area and must coordinate its activities with its neighboring Reliability Coordinators.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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E-mail:	edavis@entergy.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☐ Yes

   ☒ No

   Comments:

   We believe there is not a reliability-related need to upgrade the requirements in this set of standards. We do agree these standards need to be reviewed and revised to make them better standards.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments:

   There are several issues within the proposed SAR that concern scope, timing and sequence.

   Attachment 1 of EOP-005 contains elements that should be reviewed in the development of a restoration plan. However, we disagree with the SAR authors that - the conditions under which an entity is exempt from including an element in its system restortation plan need to be specified - should be deleted. All the reasons that a developer may need for not including an element can not be specified nor included in the requirements of a standard or a plan.

   The second paragraph of the Brief Description contains a statement that in EOP-005 the RC does not have any requirement to have a system restoration plan. We are not sure what the authors mean by this vague statement. However, we think it is appropriate and correct that the RC does not have a system restoration plan. We agree with the existing standards that the TOP and BA have restoration plans as required in EOP-005 and the RC assists with coordinating the implementation of those plans as required in EOP-006. Therefore, please delete the second paragraph of the Brief Description.

   The second sentence of the third paragraph of the Brief Description contains a statement about ensuring the lines of authority clarified under the RC (Project 2006-03) and Real-time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards. This

sentence should be deleted. The SAR contains something identified as Project 2006-03 System Restoration and Blackstart which does not seem to address the lines of authority of the RC. In addition, there is no Project 2007-03 in the SAR so we can not agree to making the EOP standards conform to requirements that are not available. In addition, the lines of authority of the RC should be contained in EOP-006.

We agree with the idea that the fill-in-the-blank components of EOP-007 and EOP-009 should be filled in, which is what we think is meant by the term "eliminate". We do not agree with the elimination of the fill-in-the-blanks if the authors really meant.

We are concerned about the open-ended statements in the SAR. The statement that - development may include other imprevements to the standards deemed appropriate - should contain a statement that those other improvements will be limited to the standards and requirements identified in this SAR, and approval of this SAR is not an open-ended approval to change standards and requirements other than the standards identified in this SAR in other standards that directly concern system restoration and are directly applicable to this approved SAR.

3. Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.

☐ Yes

☐ No

Comments:

We have no additional revisions at this time.

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Organization:		
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E-mail:		
NERC Region		**Registered Ballot Body Segment**
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Group Comments (Complete this page if comments are from a group.)

Group Name: NPCC CP9 Reliability Standards Working Group

Lead Contact: **Guy V. Zito**

Contact Organization: **Northeast Power Coordinating Council**

Contact Segment: **2**

Contact Telephone: **212-840-1070**

Contact E-mail: **gzito@npcc.org**

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Ralph Rufrano	New York Power Authority	NPCC	1
Kathleen Goodman	ISO New England	NPCC	2
Bill Shemley	ISO New England	NPCC	2
Greg Campoli	New York ISO	NPCC	2
Roger Champagne	TransEnergie HydroQuebec	NPCC	1
David Kiguel	Hydro One	NPCC	1
Herbert Schrayshuen	National Grid US	NPCC	1
Donald Nelson	MA Dept. of Tele and Energy	NPCC	9
Ed Thompson	ConEd	NPCC	1
Ron Falsetti	The IESO	NPCC	2
Al Adamson	New York State Rel. Council	NPCC	2
Guy Zito	NPCC	NPCC	2

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

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EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments:

   In EOP-5, Compliance, Section 1.4.1 -NPCC requests clarification of the phrase "critical load requirements".
   The phase can be interpreted as:
   (A) available and easily accessible loads to be restored for voltage control in network restoration on the bulk power system level. These are loads employed to expedite the restoration of the interconnection.
   (B) loads of importance to health/safety/national security - police, hospitals, govt. offices. These are really distribution loads that are restored once the interconnection is restored and the transmission system is rebuilt.
   (C) restoring off-site power to key transmission facilities.

   NPCC Participating members believe that the mention of critical load should be replaced by the restoration of critical transmission and generation facilities necessary to restore load.

   With regard to the Phase III/IV comments on EOP-005 Restoration Plans:

   1) Locking the restoration to single, contractual cranking path.

Flexibility is an essential element of a robust restoration plan. It is impossible to define in advance what equipment will be available for service in the aftermath of a system collapse.

The concept of an explicitly defined cranking path, locked into a restoration plan by contractual requirements, precludes flexibility and is restrictive-further complicating what may be an intricate process. Identifying and communicating the coordination necessary to provide the intended cranking path is a valid aspect of restoration. This is included in the second bullet of the Phase III/IV comments. The fourth bullet of the Phase III/IV comments should be removed from the SAR.

2) R3- Placing emphasis on restoring local transmission.

There is no need for the bullet on R3. The recommendation as noted encourages the restoration of local transmission and load at a higher priority than reestablishing the interconnection. Restoring the interconnection is the highest priority. In the process of achieving that end, some, minimal restoration of local transmission will be involved.

This is in direct conflict with the industry comments on V0 Standards which requires modifications to assign priority to the integrity of the interconnection.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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Telephone:	804-273-3393	
E-mail:	jack_kerr@dom.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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	☐	7 — Large Electricity End Users
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	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

This project involves upgrading the requirements in these four standards:

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There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: Contrary to what the SAR says, there is indeed a requirement for Reliability Coordinators to have System Restoration Plans. In fact, requirement R3 of EOP-006 states, "The Reliability Coordinator shall have a Reliability Coordinator Area restoration plan that provides coordination between individual Transmission Operator restoration plans and that ensures reliability is maintained during system restoration events." With this requirement, it is not necessary for RCs to have restoration plans that are equivalent to the TO and BA plans. However, RCs must be involved in the development and approval of the TO and BA plans in order to ensure that the RC's over-arching plan is viable and actually maintains reliability during system restoration events.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments: The existing standards (and the Functional Model) do not address the role of the Transmission Owner in system restoration. For example, assessment of the extent of isolation of a storm-ravaged system usually requires "boots on the ground" if normal data/voice communications are disrupted. Also, assessments of transmisssion asset damge requires visual inspections. Typically, it is Transmission Owner personnel who perform these assessments and inspections. Also, the repair of damaged transmission facilities and the determination of the readiness of those facilities to be re-energized is the responsibility of the asset owner. A determination of readiness for re-energization usually involves a re-examination of facility limits, calculation of short-circuit current availability, and an evaluation of protective relaying viability given the abnormal system topologies that can result from a major storm. These are typically Transmission Owner responsibilities. Transmission Owners have restoration plans to ensure that they are ready and able to perform these vital restoration tasks.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Group Comments (Complete this page if comments are from a group.)

Group Name: Southern Company

Lead Contact: **J. T. Wood**

Contact Organization: **Southern Company Services**

Contact Segment: **1**

Contact Telephone: **205-257-6238**

Contact E-mail: **jtwood@southernco.com**

Additional Member Name	Additional Member Organization	Region*	Segment*
Marc Butts	Southern Company Services	SERC	1
Roman Carter	Southern Company Services	SERC	1
Robert Jones	Southern Company Services	SERC	1

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☒ No

   Comments: There is a concern that the SAR process is being skipped over (due to the granular nature of the recommendation changes) and the changes being recommended are more inclined to be addressed by the Standard (not SAR) drafting team. The SAR is not "clearly defining the scope". For example, they have started attaching some documents with the title "Standard Review Form". Those documents contain comments generated by FERC, NERC, and the industry. However, the SAR does not say whether these comments must be accomodated or whether they just need to be considered.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments: Some items that need to be considered is that in some of the comments it recommends "Add a requirement for..". Does this mean the standards drafting team must add a requirement or just have to consider adding the requirement and only do so if they think it is the right thing to do? Another example can be found in the scope section. The following statement is made: "EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system resoration plan - the Reliability Coordinator does not have any requirement to have a system restoration plan." That is all that is said about it. Does this compel the standards drafting team to add a requirement for the Reliability Coordinator? Or does it merely mean that the SDT should consider adding a requirement? These examples need to be clear to the drafting team.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Jason Shaver	
Organization:	American Transmission Co.	
Telephone:	262 506 6885	
E-mail:	jshaver@atcllc.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☒ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: ATC agrees that an upgrade is needed on this set of standards.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: The SAR DT needs to provide a more detailed explanation as to the role of each entity that is checked under the "Reliability Functions" section, particularly those roles that have not been identified under the Applicability section for these Standards in the past, such as Planning Authority, Distribution Provider and Load Serving Entity.

   The SAR should task the SDT with developing a comprehensive set of standards that address blackstart planning, testing and coordination. In order to perform this task the team should be given wide latitude in developing a new set of standards and requirements. Therefore the SAR should not limit the team to organize its work within a predefined number of standards as more standards may be required to address the roles of new entities not subject to these standards in the past.

   Does the SDT envision any major changes to the roles currently performed by the Transmission Operator, Balancing Authority, Reliability Authority, Generator Owner, Generator Operator? If so, what are they?

   Finally, ATC believes that any proposed requirements for parties to execute contractual agreements, as described under "Phase III/IV comments," are outside the scope and purview of the SDT.

   EOP-007-0

   ATC agrees that this standard should not apply to the RRO. ATC suggests that the SDT review Standard EOP-007-0 in terms of having the Reliability Coordinator perform those tasks currently performed by the RRO.

   EOP-005-1 (Attachment 1)

Lastly, ATC would like to see a change to one of the sentences in the Brief Discription section of the SAR.

Third Sentence of the First Paragraph:

"The Elements in the attachment need to be reviewed and the condition under which an entity is exempt…."

Suggested Change:

The elements in the attachment need to specify which entities are responsible for each element listed.

3. Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.

☐ Yes

☒ No

Comments:
References to Standard EOP-005-0 (Version 0) should be replaced with EOP-005-1 (Version 1) which will be effective on January 1, 2007

References to Standard EOP-006-0 (Version 0) should be replaced with EOP-006-1 (Version 1) which will be effective on January 1, 2007

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Jerad Barnhart	
Organization:	NSTAR Electric	
Telephone:	781-441-8209	
E-mail:	jerad_barnhart@nstaronline.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments:

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   ☐ Yes

   ☐ No

   Comments:

   In EOP-5, Compliance, Section 1.4.1 -NSTAR Electic requests clarification of the phrase "critical load requirements".
   The phase can be interpreted as:
   (A) available and easily accessible loads to be restored for voltage control in network restoration on the bulk power system level.
   (B) loads of importance to health/safety/national security - police, hospitals, govt. offices. These are really distribution loads that are restored once the interconnection is restored and the transmission system is rebuilt.
   (C) restoring off-site power to key transmission facilities.

   NSTAR Electric believes that the mention of critical load should be replaced by the restoration of critical transmission and generation facilities necessary to restore load.

   With regard to the Phase III/IV comments on EOP-005 Restoration Plans:

   1) Locking the restoration to single, contractual cranking path.

Flexibility is an essential element of a robust restoration plan. It is impossible to define in advance what equipment will be available for service in the aftermath of a system collapse.

The concept of an explicitly defined cranking path, locked into a restoration plan by contractual requirements, precludes flexibility and is restrictive-further complicating what may be an intricate process. Identifying and communicating the coordination necessary to provide the intended cranking path is a valid aspect of restoration. This is included in the second bullet of the Phase III/IV comments. The fourth bullet of the Phase III/IV comments should be removed from the SAR.

2) R3 - Placing emphasis on restoring local transmission.

There is no need for the bullet on R3. The recommendation as noted encourages the restoration of local transmission and load at a higher priority than reestablishing the interconnection. Restoring the interconnection is the highest priority. In the process of achieving that end, some, restoration of local transmission will be involved.

This is in direct conflict with the industry comments on V0 Standards which requires modifications to assign priority to the integrity of the interconnection.

Changing the emphasis of R3 should be removed from the SAR.

3) R11.5 - Placing local load restoration above re-establishing the interconnection.

This follows the same argument addressed above. Restoration of the interconnection is a higher priority that the restoration of local load.

R11.5 should be retained in the SAR.

R6 mentions providing training requirements, however this training requirement is already in PER-002-R3.1. There is also a training requirement in PER-004 R4 for the RC requirement. Duplication should be avoided and training requirements should be included in a training standard.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	James H. Sorrels, Jr.	
Organization:	American Electric Power	
Telephone:	(614) 716-2370	
E-mail:	jhsorrels@AEP.com	
NERC Region		**Registered Ballot Body Segment**
☒ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☒ **RFC** ☐ **SERC** ☒ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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   ☒ Yes

   ☐ No

   Comments:

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   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: None identified at this time.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Jim Useldinger	
Organization:	Kansas City Power & Light Company	
Telephone:	816-654-1212	
E-mail:	jim.useldinger@kcpl.com	
NERC Region		**Registered Ballot Body Segment**
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1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: There are reliability-related reasons to upgrade the requirements in these standards

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: The scope needs to be more focused.
   EOP-5
   All comments under the various groups identified are not specific enough to respond to except the comments under "FERC NOPR", "FERC Staff", 4th bulleted item under "V0 Industry Comments" and all bullets under "Phase III/IV Comments". Agree wth all bulleted items under "FERC NOPR" and "FERC Staff". Do not agree with bulleted items 1-7 or 10-12 and agree with bulleted items 8 & 9 under "Phase III/IV Comments". Regarding bulleted items 8 & 9 under "Phase III/IV Comments", would recommend the testing and training periodicity for R5 and R6 be on an annual basis.

   Do not agree that Load Serving Entities or Generation Owners should have restoration plans. The proposed EOP-5 version 1 does not include any requirement or applicability for the LSE and GO and this is the way it should be.

   EOP-6
   Agree with comments regarding the measures and the measures proposed in EOP-6 version 1. Do not agree with any of the other comments under "FERC NOPR" or "FERC Staff". The comments under "Regional Fill-in-the-Blank Team Comments" are not specific enough to respond to.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

Comments: This does not require a yes/no resonse. These Standards should continue to focus on preparing for restoration and not add more administrative requirements.

EOP-5
R9: It is unneccessary to include cranking paths in R9. It should only be necessary to establish the black start unit(s) with which the system restoration will begin in the restoration plan for the TOP. However, it is of no consequence to remove or change the language proposed in EOP-5 version 1.

EOP-6
Would suggest the addition of an RC requirement to assess initial disturbance conditions for the purpose of:
1. Establish the need to suspend energy and ancilliary service market operations in whole or in part
2. Establish the need to implement TOP and BA system restoration plans or for TOP or BA to await further instruction from the RC

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	John E. Sullivan	
Organization:	Ameren	
Telephone:	(314) 554-3833	
E-mail:	JSullivan@ameren.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
	☐	2 — RTOs, ISOs,
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	☐	5 — Electric Generators
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	☐	7 — Large Electricity End Users
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	☐	9 — Federal, State, Provincial Regulatory or other Government Entities
	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

Background Information:

This project involves upgrading the requirements in these four standards:

EOP-005 — System Restoration Plans
EOP-006 — Reliability Coordination - System Restoration
EOP-007 — Establish, Maintain, and Document a Regional Blackstart Capability Plan
EOP-009 — Documentation of Blackstart Generating Unit Test Results

There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

The development may include other improvements to the standards deemed appropriate by the drafting team, with the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.

You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☐ Yes

   ☒ No

   Comments: No additional comments.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments: Does this SAR apply to Reliability Standards EOP-005-0 and EOP-006-0, or to EOP-005-1 and EOP-006-1?

   We do not see a benefit to adding LSE's to the Applicability section of EOP-005-1, and we do not believe adding LSE's to R4 of EOP-005-1 would contribute to the effectiveness of the restoration plan, and would make implementation of the plan more onerous.

   We do not agree with deleting R11.5.4 of EOP-005-1. However, this item should be retained as a consideration, not a requirement.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: The VRF comments to EOP-005-1 are confusing. It is not certain to what these comments refer.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:		
Organization:		
Telephone:		
E-mail:		
NERC Region		**Registered Ballot Body Segment**
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Group Comments (Complete this page if comments are from a group.)

Group Name: Tennessee Valley Authority

Lead Contact: **Kathy Davis**

Contact Organization: **Transmission & Reliability Organization**

Contact Segment: **1**

Contact Telephone: **423-751-8023**

Contact E-mail: **kadavis@tva.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
Sue Mangum Goins	TVA	SERC	1
Earl Shockley	TVA	SERC	1
Jerry Landers	TVA	SERC	1
Mark Creech	TVA	SERC	1

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

Both EOP-005 and EOP-006 contain a mix of requirements that address advance planning and real-time operations. These need to be carefully reviewed to ensure that the lines of authority clarified under the Reliability Coordination (Project 2006-03) and Real Time Transmission Operations and Balancing of Load and Generation (Project 2007-03) are fully supported in the refinement of this set of standards.

EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: We do not agree that there should be a requirement for an RC Restoration Plan in EOP-005. It may be appropriate to add a requirement in 005 that says the RC is aware of the TO and BA Plans but is not bound to it as they are looking at the bigger picture. The requirements in EOP-006, for the RC's role in System Restoration, are sufficient and as long as the Functional Model seperates entities then it is appropriate for their requirements to be in seperte standards as we see it.
   There is a "mix of requirements" between Advance Planning and Real-Time activities and we think they need to be seperated with section headings for the two.
   We don't understand what the "fill-in-the-blank" components are.
   We don't agree that Attachment 1 from EOP-005 should be moved into the requirements of the Standard. Instead, the industry should be asked to submit what they think should be included.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: All of the "Standard Review Forms" refer to the Version 0 documents…why not include the Version 1 that is due to go into affect in '07 for EOP-005 and EOP-006?

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☒ No

   Comments:

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Kathleen Goodman	
Organization:	ISO New England	
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NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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	☐	10 — Regional Reliability Organizations and Regional Entities

Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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Industry debate is needed over the contents of Attachment 1 in EOP-005. The attachment includes a list of elements that must be contained in a system restoration plan, 'if applicable'. The elements in the attachment need to be reviewed and the conditions under which an entity is exempt from including an element in its system restoration plan need to be specified. If possible, the required elements should be removed from the attachment and included in the body of the requirements.

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EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments:

   In EOP-5, Compliance, Section 1.4.1 -ISO New England requests clarification of the phrase "critical load requirements".
   The phase can be interpreted as:
   (A) available and easily accessible loads to be restored for voltage control in network restoration on the bulk power system level.
   (B) loads of importance to health/safety/national security - police, hospitals, govt. offices. These are really distribution loads that are restored once the interconnection is restored and the transmission system is rebuilt.
   (C) restoring off-site power to key transmission facilities.

   ISO New England believes that the mention of critical load should be replaced by the restoration of critical transmission and generation facilities necessary to restore load.

   With regard to the Phase III/IV comments on EOP-005 Restoration Plans:

   1) Locking the restoration to single, contractual cranking path.

Flexibility is an essential element of a robust restoration plan. It is impossible to define in advance what equipment will be available for service in the aftermath of a system collapse.

The concept of an explicitly defined cranking path, locked into a restoration plan by contractual requirements, precludes flexibility and is restrictive-further complicating what may be an intricate process. Identifying and communicating the coordination necessary to provide the intended cranking path is a valid aspect of restoration. This is included in the second bullet of the Phase III/IV comments. The fourth bullet of the Phase III/IV comments should be removed from the SAR.

2) R3 - Placing emphasis on restoring local transmission.

There is no need for the bullet on R3. The recommendation as noted encourages the restoration of local transmission and load at a higher priority than reestablishing the interconnection. Restoring the interconnection is the highest priority. In the process of achieving that end, some, restoration of local transmission will be involved.

This is in direct conflict with the industry comments on V0 Standards which requires modifications to assign priority to the integrity of the interconnection.

Changing the emphasis of R3 should be removed from the SAR.

3) R11.5 - Placing local load restoration above re-establishing the interconnection.

This follows the same argument addressed above. Restoration of the interconnection is a higher priority that the restoration of local load.

R11.5 should be retained in the SAR.

R6 mentions providing training requirements, however this training requirement is already in PER-002-R3.1. There is also a training requirement in PER-004 R4 for the RC requirement. Duplication should be avoided and training requirements should be included in a training standard.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Michael Anthony	
Organization:	Progress Energy Carolinas	
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E-mail:	mike.anthony@pgnmail.com	
NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☐ **NPCC** ☐ **RFC** ☒ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☒	1 — Transmission Owners
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Group Comments (Complete this page if comments are from a group.)

Group Name:

Lead Contact:

Contact Organization:

Contact Segment:

Contact Telephone:

Contact E-mail:

Additional Member Name	Additional Member Organization	Region*	Segment*

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EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☒ Yes

   ☐ No

   Comments:
   EOP-005:

   1. Requirements in EOP-005 should include a defintion of "periodically." We would recommend a periodicity of annually to coincide with annual requirement to review and update the restoration plan at least annually.

   2. R3 could be rolled into R1.

   EOP-006:

   The SAR indicates actions should be defined for R6. The actions taken to restore normal operations would depend on the operating emergency. Prescriptive actions should be avoided.

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Group Comments (Complete this page if comments are from a group.)

Group Name: WECC Reliability Coordination Comments Work Group

Lead Contact: **Nancy Bellows**

Contact Organization: **WACM**

Contact Segment: **2**

Contact Telephone: **970-461-7246**

Contact E-mail: **bellows@wapa.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
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Tom Botello	SCE	WECC	2
Richard Ellison	BPA	WECC	2
Mike Gentry	SRP	WECC	2
Robert Johnson	PSC	WECC	2
Greg Tillitson	CMRC	WECC	2

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Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: There are gaps in the current version

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments: The group agrees with the scope of the proposed project, but feels that clarification of the portion of blackstart and restoration plans that the reliability coordinator approves needs to be restricted to a reasonable expectation. The Reliability Coordinator should review and approve only those portions of individual restoration plans that establish the backbone power system. There is no need for the Reliability Coordinator to be responsible for detailed plans of the BA, TO, GOP, LSE, etc. Specify the portions of the individual plans that need Reliability Coordinator review and approval.

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☒ No

   Comments:

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Group Comments (Complete this page if comments are from a group.)

Group Name: Public Service Commission of South Carolina

Lead Contact: **Phil Riley**

Contact Organization: **Public Service Commission of South Carolina**

Contact Segment: **9**

Contact Telephone: **803-896-5154**

Contact E-mail: **philip.riley@psc.sc.gov**

Additional Member Name	Additional Member Organization	Region*	Segment*
Mignon L. Clyburn	Public Service Commission of SC	SERC	9
Elizabeth B. "Lib" Fleming	Public Service Commission of SC	SERC	9
G. O'Neal Hamilton	Public Service Commission of SC	SERC	9
John E. "Butch" Howard	Public Service Commission of SC	SERC	9
Randy Mitchell	Public Service Commission of SC	SERC	9
C. Robert "Bob" Moseley	Public Service Commission of SC	SERC	9
David A. Wright	Public Service Commission of SC	SERC	9

*If more than one Region or Segment applies, indicate the best fit for the purpose of these comments. Regional acronyms and segment numbers are shown on prior page.

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There are many stakeholder comments about this set of standards that need to be resolved. For example, EOP-005 only requires the Transmission Operator and the Balancing Authority to have a system restoration plan – the Reliability Coordinator does not have any requirement to have a system restoration plan.

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EOP-007 and EOP-009 have some 'fill-in-the-blank' components to eliminate.

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You do not have to answer all questions. Enter All Comments in Simple Text Format.

Insert a "check" mark in the appropriate boxes by double-clicking the gray areas.

1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments:

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☒ Yes

   ☐ No

   Comments:

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: None identified.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Robert Coish	
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NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT**	☒	1 — Transmission Owners
☐ **FRCC**	☐	2 — RTOs, ISOs,
☒ **MRO**	☒	3 — Load-serving Entities
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1. **Do you believe that there is a reliability-related need to upgrade the requirements in this set of standards?**

   ☒ Yes

   ☐ No

   Comments: There is too much ambiguity in the requirements and measures, plus some requirements may allow too much leaway which may affect reliability of restoring the system. It is also not clear which standard is being reviewed; ie. the SAR form lists the first standard as EOP-005-0 but the comments are based on EOP-005-1.

2. **Do you agree with the scope of the proposed project? (The scope includes all the items noted on the 'Standard Review Forms' attached to the SAR as well as other improvements to the standards that meet the consensus of stakeholders, consistent with establishing high quality, enforceable, and technically sufficient bulk power system reliability standards.)**

   ☐ Yes

   ☒ No

   Comments: Manitoba Hydro believes these standards need to be as high quality as possible, as consistent as possible and have the measurements in place to ensure reliability. This SAR should require that Violation Risk Factors (VRF's) be assigned to all the requirements in the revised standards and that the VRF's be included in the revised standards. THis can be coordinated with the current activity on

3. **Please identify any additional revisions that should be incorporated into this set of standards, beyond those that have already been identified in the SAR.**

   ☐ Yes

   ☐ No

   Comments: EOP-005-0 and -1
   Applicability - This should apply to Reliability Coordinators as well as TOs and BAs.
   R1 (-0 + -1) - As part of integrating the appendix items into the requirements section the last sentence of R1 could be eliminated.
   R5 (-0 + -1) - I think the testing period of the telecommunications systems should be defined as well as the type of testing that needs to be done. If auditors start asking questions about tests that are not defined or required its not fair to the entity being audited if they haven't performed that particular test. It should also be identified if main or backup systems need to be tested or if there should be backup systems.
   R6 (-0 + -1) - Reliability Coordinator needs to be included in the training of personnel as part of this standard. Also the type of training needs to be defined (simulations, table top exercises), and the base topics to be trained on (philosophy, building of islands, blackstart) should be defined.

R7 (-0 + -1) - The type of testing or simulations should be defined; should dynamic stability studies, as well as voltage and frequency studies be done on the restoration plans or is running a simulation sufficient, unfortunately a simulation doesn't give you a complete enough evaluation.
R8 (-0) - availability and location aren't enough to ensure the blackstart units can do the job, you also have to ensure the capability of the units and the number of units are sufficient to blackstart. Testing and studies need to be done to ensure the units can accomplish the task.
R8 (-1) - Verification should be done by dynamic, voltage and frequency studies. Verification that the blackstart units are capable should be included with the "number, size, and location". The RRO isn't included in the Applicability section yet is looks like its their plan that the TO should be meeting instead of meeting the TO plan.
R9 (-1) - Its not clear as to which units this requirement is refering to, is it refering to a remote blackstart unit or other units on the system that need to be started as part of restoring the system?
R9.4 (-0) and R11.4 (-1) - For systems that have nuclear stations it should be made a part of their plans to give restoration of off-site power to the plants a high priority.
R9.5.1 (-0) and R11.5.1 (-1) - When tying two islands together the emphasis should be on minimizing the flow through the tie point once synched and closed rather than when voltage, frequency and phase angle permit. The resultant flow could be greater than expected if the system operator simply relies on the relaying to allow closing. Special attention should be paid to frequency and voltage when tying islands and bringing them as close as possible together prior to closing.
R9.5.4 (-0) and R11.5.4 (-1) - Typically is not the surrounding areas that require shedding of load to reconnect. The surrounding areas usually means the stable or larger of areas meaning frequency in the surrounding areas should be good to start with. It's the area that want to synch that should be adding generation or shedding load to be able to synch with the surrounding areas.
R10 (-1) - The word simulation comes up again, it should be defined what simulation is or whether its really refering to studies as done by system performance such as dynamic stability studies.
C. Measures (-1) M1. - Should read studies instead of simulations.
D. Compliance, 1.1.1 (-0) and 1.4.1 (-1) - its not clear what is meant by "identification of critical requirements", is it just identifying where critical loads exist so they can be brought on as part of the restoration process or do the voltage and frequency requirements of each critical load have to be identified as part of the restoration plan.
1.4.6 (-1) - the units to be started should be clarified.
1.4.7 (-1) - should refer to the TO retoration plan. If the reagional plan is included there needs to be a requirement to share the regional plan with the TOs.
Attachment 1-EOP-005-0 and attachment EOP-005 - 3. - It would be impractical to have a plan for every possibility.
6. - Should this not fall under the dynamic type studies done by engineering studies personnel. To what extent should plans be simulated or tested?

EOP-006-0 and -1
R1 (-0) and (-1) - The RC should be more than just aware, the Reliability Coordinator's system restoration plan should coordinate with the TO's plan so the RC should thoroughly knowledgable with the TO plans.
R5 (-0) and (-1) - "major system islands" needs to be defined, at what point the RC gets involved needs to be clear. They don't necessarily need to be involved with the location of the synchronization point (the TOs should be aware of where they can synchronize).

EOP-007-0
R1.2 - Simulation doesn't give the dynamic response the proper studies can give (ie; dynamic stability studies, voltage and frequency studies).
R1.3.1 - What if it's the same one third that gets tested each year, the remaining two thirds may not be usable when the time comes to do a real restoration. You can't assume that each year a different one third will be tested. Also in order to provide training to plant personnel testing all blackstart units each year will ensure more plant operators are trained in the procedure.
R1.3.2 - this needs to be more specific as to the type of testing required.
Footer 1 - this should be included in the requirements section.

EOP-009-0
R1 - Besides the RRO the TO has blackstart requirements that need to be met.

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
Name:	Ron Falsetti	
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NERC Region		**Registered Ballot Body Segment**
☐ **ERCOT** ☐ **FRCC** ☐ **MRO** ☒ **NPCC** ☐ **RFC** ☐ **SERC** ☐ **SPP** ☐ **WECC** ☐ **NA – Not Applicable**	☐	1 — Transmission Owners
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   ☒ Yes

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   Comments:

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   ☒ Yes

   ☐ No

   Comments:
   This SAR updates EOP-005-0 and EOP-006-0 standards. The industry already approved EOP-005-1 & EOP-006-1. What will happen to those standards if this SAR is approved? Is this an oversight?

   A comment on the Compliance section of EOP-005.

   In EOP-005, Compliance, Section 1.4.1 - The intent of the phrase "critical load requirements" needs to be clarified.

   The phase can be interpreted as:
   (A) available and easily accessible loads to be restored for voltage control in network restoration on the bulk power system level. These are loads employed to expedite the restoration of the interconnection.
   (B) loads of importance to health/safety/national security - police, hospitals, govt. offices. These are really distribution loads that are restored once the interconnection is restored and the transmission system is rebuilt.
   (C) restoring off-site power to key transmission facilities.

We believe the intention of the phase is related to prioritization of load restoration at the local distribution level, and as such should be the very last item in any list of restoration planning and procedure.

With regard to the Phase III/IV comments on EOP-005 Restoration Plans:

1) Locking the restoration to single, contractual cranking path.

Flexibility is an essential element of a robust restoration plan. It impossible to define in advance what equipment will be available for service in the aftermath of a system collapse.

The concept of an explicitly defined cranking path, locked into a restoration plan by contractual requirements, precludes flexibility. Identifying and communicating the coordination necessary to provide the intended cranking path is a valid aspect of restoration. This is included in the second bullet of the Phase III/IV comments. The fourth bullet of the Phase III/IV comments should be removed from the SAR.

2) R3- Placing emphasis on restoring local transmission.

There is no need for the bullet regarding placing emphasis on restoring local transmission in R3. The recommendation as noted encourages the restoration of local transmission and load at a higher priority than reestablishing the interconnection. Restoring the interconnection is the highest priority. In the process of achieving that end, some, minimal restoration of local transmission will be involved.

This is in direct conflict with the industry comments on V0 Standards which requires modifications to assign priority to the integrity of the interconnection.

The need for changing the emphasis of R3 should be removed from the SAR.

3) R11.5- Placing local load restoration above re-establishing the interconnection.

This follows the same argument addressed above. Restoration of the interconnection is a higher priority that the restoration of local load.

R11.5 should be retained in the SAR.

Comments on EOP-006 & EOP-007 Standards:

EOP 006-1 R3 sates “The Reliability Coordinator shall have a Reliability Coordinator Area restoration plan that provides coordination between individual Transmission Operator restoration plans and that ensures reliability is maintained during system restoration events.”

EOP 007 R1 states “Each Regional Reliability Organization shall establish and maintain a system BCP, as part of an overall coordinated Regional SRP….”

Is it an acceptable practice for a Reliability Coordinator, in approving its Transmission Operator restoration plans per appropriate assessment criteria and ensuring they enable coordinated restoration with the interconnections, be deemed as an alternative to creating and maintaining regional plans? Otherwise the scope of such regional plans

should be specified to limit their scale. Consider the large number of Transmission Operators (and restoration plans) in those Reliability Coordinator Areas with large footprints such as PJM, MISO and California ISO.

The same consideration applies to a Regional Black Start Capability Plan as assessed by the Regional Reliability Organization. Given that black start is integral to system restoration how it is proposed to be handled in instances where the Reliability Coordinator Area differs from the RRO boundary?

Additionally, EOP 006-1 should capture Reliability Coordinator to other Reliability Coordinator 'coordination'. Specifically, "Reliability Coordinators shall coordinate their system restoration plans and efforts together including joint participation in drills and exercises."

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Individual Commenter Information **(Complete this page for comments from one organization or individual.)**		
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NERC Region		**Registered Ballot Body Segment**
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   ☒ Yes

   ☐ No

   Comments: Admittedly, there are some "holes" in the current version.

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   ☒ Yes

   ☐ No

   Comments: The scope appears reasonable in order to provide measurable reauirements.

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   ☐ Yes

   ☒ No

   Comments: