NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

# Standard Authorization Request (SAR)

Complete and please email this form, with attachment(s) to: sarcomm@nerc.net

The North American Electric Reliability Corporation (NERC) welcomes suggestions to improve the reliability of the bulk power system through improved Reliability Standards.

| Requested information | | | |
|---|---|---|---|
| SAR Title: | Revisions to TPL-007-3 Transmission System Planned Performance for Geomagnetic Disturbance | | |
| Date Submitted: | | | |
| SAR Requester | | | |
| Name: | Soo Jin Kim | | |
| Organization: | NERC | | |
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| SAR Type (Check as many as apply) | | | |
| ☐ New Standard<br>☒ Revision to Existing Standard<br>☐ Add, Modify or Retire a Glossary Term<br>☐ Withdraw/retire an Existing Standard | | ☐ Imminent Action/ Confidential Issue (SPM Section 10)<br>☐ Variance development or revision<br>☐ Other (Please specify) | |
| Justification for this proposed standard development project (Check all that apply to help NERC prioritize development) | | | |
| ☒ Regulatory Initiation<br>☐ Emerging Risk (Reliability Issues Steering Committee) Identified<br>☐ Reliability Standard Development Plan | | ☐ NERC Standing Committee Identified<br>☐ Enhanced Periodic Review Initiated<br>☐ Industry Stakeholder Identified | |
| Industry Need (What Bulk Electric System (BES) reliability benefit does the proposed project provide?): | | | |
| On November 15, 2018, the Federal Energy Regulatory Commission (FERC) issued Order No. 851 in order to modify Reliability Standard TPL-007-2. | | | |
| Purpose or Goal (How does this proposed project provide the reliability-related benefit described above?): | | | |
| This project will address the directives issued by FERC in Order No. 851 to modify Reliability Standard TPL-007-2. FERC directed NERC to submit modifications to: (1) require the development and implementation of corrective action plans to mitigate assessed supplemental GMD event vulnerabilities (P 29); and (2) to replace the corrective action plan time-extension provision in Requirement R7.4 with a process through which extensions of time are considered on a case-by-case basis (P 54). NERC was directed to submit the modified Reliability Standard for approval within 12 months from the effective date of Reliability Standard TPL-007-2. | | | |

| Requested information |
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| Project Scope (Define the parameters of the proposed project): |
| This project will address the directives issued by FERC in Order No. 851 to modify Reliability Standard TPL-007-3. |
| Detailed Description (Describe the proposed deliverable(s) with sufficient detail for a drafting team to execute the project. If you propose a new or substantially revised Reliability Standard or definition, provide: (1) a technical justification[1]which includes a discussion of the reliability-related benefits of developing a new or revised Reliability Standard or definition, and (2) a technical foundation document (*e.g.* research paper) to guide development of the Standard or definition): |
| The Standard Drafting Team (SDT) will address FERC's directives in Order No. 851 that require the development and completion of corrective actions plans to mitigate assessed supplemental GMD event vulnerabilities. The SDT will also modify the provisions in Reliability Standard TPL-007-3, Requirement R7.4 that allows applicable entities to exceed deadlines for completing corrective action plan tasks when situations beyond the control of the responsible entity arise.<br><br>The SDT will also need to evaluate the Canadian variance and make any appropriate changes to the variance based on the modifications arising from FERC Order No. 851. |
| Cost Impact Assessment, if known (Provide a paragraph describing the potential cost impacts associated with the proposed project): |
| The potential cost impacts associated with adding corrective action plan requirements for supplemental GMD event vulnerabilities are unknown at this time. |
| Please describe any unique characteristics of the BES facilities that may be impacted by this proposed standard development project (*e.g*. Dispersed Generation Resources): |
| Not Applicable |
| To assist the NERC Standards Committee in appointing a drafting team with the appropriate members, please indicate to which Functional Entities the proposed standard(s) should apply (*e.g*. Transmission Operator, Reliability Coordinator, etc. See the most recent version of the NERC Functional Model for definitions): |
| Planning Coordinator, Transmission Planner, Transmission Owner, Generator Owner |
| Do you know of any consensus building activities[2] in connection with this SAR? If so, please provide any recommendations or findings resulting from the consensus building activity. |
| No |
| Are there any related standards or SARs that should be assessed for impact as a result of this proposed project? If so which standard(s) or project number(s)? |
| Project 2018-01 TPL-007-3 (Canadian Variance). EOP-010-1 Geomagnetic Disturbance Operations |
| Are there alternatives (e.g. guidelines, white paper, alerts, etc.) that have been considered or could meet the objectives? If so, please list the alternatives. |

[1] The NERC Rules of Procedure require a technical justification for new or substantially revised Reliability Standards. Please attach pertinent information to this form before submittal to NERC.

[2] Consensus building activities are occasionally conducted by NERC and/or project review teams. They typically are conducted to obtain industry inputs prior to proposing any standard development project to revise, or develop a standard or definition.

| Requested information |
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| Order No. 830 GMD Research Work Plan could help to inform the SDT while making the required modifications to the standard laid out in Order No. 851. |

| Reliability Principles | |
|---|---|
| Does this proposed standard development project support at least one of the following Reliability Principles (Reliability Interface Principles)? Please check all those that apply. | |
| ☒ | 1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards. |
| ☐ | 2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand. |
| ☒ | 3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably. |
| ☐ | 4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained and implemented. |
| ☐ | 5. Facilities for communication, monitoring and control shall be provided, used and maintained for the reliability of interconnected bulk power systems. |
| ☐ | 6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions. |
| ☒ | 7. The security of the interconnected bulk power systems shall be assessed, monitored and maintained on a wide area basis. |
| ☐ | 8. Bulk power systems shall be protected from malicious physical or cyber attacks. |

| Market Interface Principles | |
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| Does the proposed standard development project comply with all of the following Market Interface Principles? | Enter (yes/no) |
| 1. A reliability standard shall not give any market participant an unfair competitive advantage. | Yes |
| 2. A reliability standard shall neither mandate nor prohibit any specific market structure. | Yes |
| 3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. | Yes |
| 4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. | Yes |

| Identified Existing or Potential Regional or Interconnection Variances | |
|---|---|
| Region(s)/ Interconnection | Explanation |
| *TPL-007-3 Canadian Variance* | The only difference between TPL-007-3 and TPL-007-2 is that TPL-007-3 adds a Canadian Variance to address regulatory practices/processes within Canadian jurisdictions and to allow the use of Canadian-specific data and research to define and implement alternative GMD event(s) that achieve at least an equivalent reliability objective of the defined benchmark and supplemental GMD events in TPL-007-2 Attachment 1. |

# For Use by NERC Only

| SAR Status Tracking (Check off as appropriate) | |
|---|---|
| ☐ Draft SAR reviewed by NERC Staff<br>☐ Draft SAR presented to SC for acceptance<br>☐ DRAFT SAR approved for posting by the SC | ☐ Final SAR endorsed by the SC<br>☐ SAR assigned a Standards Project by NERC<br>☐ SAR denied or proposed as Guidance document |

**Version History**

| Version | Date | Owner | Change Tracking |
|---|---|---|---|
| 1 | June 3, 2013 | | Revised |
| 1 | August 29, 2014 | Standards Information Staff | Updated template |
| 2 | January 18, 2017 | Standards Information Staff | Revised |
| 2 | June 28, 2017 | Standards Information Staff | Updated template |