

Standard Authorization Request (SAR)

Complete and submit this form, with attachment(s) to the [NERC Help Desk](#). Upon entering the Captcha, please type in your contact information, and attach the SAR to your ticket. Once submitted, you will receive a confirmation number which you can use to track your request.

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 FAC-001-4 and FAC-002-4		
Date Submitted:	October 29, 2024		
SAR Requester			
Name:	Julia Matevosyan, ESIG (NERC IRPS Chair) Rajat Majumder, Invenergy (NERC IRPS Vice Chair)		
Organization:	NERC Inverter-Based Resource Performance Subcommittee (IRPS)		
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SAR Type (Check as many as apply)			
<input type="checkbox"/>	New Standard	<input type="checkbox"/>	Imminent Action/ Confidential Issue (SPM Section 10)
<input checked="" type="checkbox"/>	Revision to Existing Standard	<input type="checkbox"/>	Variance development or revision
<input type="checkbox"/>	Add, Modify or Retire a Glossary Term	<input type="checkbox"/>	Other (Please specify)
<input type="checkbox"/>	Withdraw/retire an Existing Standard		
Justification for this proposed Standard development project (Check all that apply to help NERC prioritize development)			
<input type="checkbox"/>	Regulatory Initiation	<input checked="" type="checkbox"/>	NERC Standing Committee Identified
<input type="checkbox"/>	Emerging Risk (Reliability Issues Steering Committee) Identified	<input type="checkbox"/>	Enhanced Periodic Review Initiated
<input type="checkbox"/>	Reliability Standard Development Plan	<input checked="" type="checkbox"/>	Industry Stakeholder Identified
What is the risk to the Bulk Electric System (What Bulk Electric System (BES) reliability benefit does the proposed project provide?):			
<p>The bulk power system (BPS) in North America is undergoing a rapid transformation towards high penetrations of inverter-based resources. This grid transformation adds significant complexity and a changing risk landscape that requires inverter-based resource- (IBR) specific Standards requirements. Recent North American Electric Reliability Corporation (NERC) disturbance reports such as San Fernando, Odessa I and II, Southwest Utah, etc.¹ as well as the November 2023 <i>NERC Inverter-Based Resource (IBR) Performance Issues Report Findings from Level 2 Alert</i>² show evidence of systemic deficiencies in both IBR performance and modeling that create numerous:</p>			

¹ <https://www.nerc.com/pa/rmm/ea/Pages/Major-Event-Reports.aspx>

² https://www.nerc.com/comm/RSTC_Reliability_Guidelines/NERC_Inverter-Based_Resource_Performance_Issues_Public_Report_2023.pdf

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- Opportunities for improvement to ensure consistent practices in implementation of Federal Energy Regulatory Commission ("FERC") Generator Interconnection requirements under the Large and Small Generator Interconnection Agreements and Procedures (LGIA/LGIP/SGIA/SGIP also referred to herein as the GIA and GIP for convenience). Failures in the voluntary adoption of NERC recommendations and guidance to enhance generator interconnection requirements and ensure reliable connection IBRs.
- Opportunities to enhance current practices for assessing IBR plant capability and performance against applicable generator interconnection requirements as created according to FAC-001. (i.e., conformance testing)
- Opportunities to enhance generator interconnection study processes as created according to FAC-002 to help ensure the reliable commissioning of IBR facilities during the generator interconnection process, due to gaps in current IBR commissioning practices.
 - Lack of adequate or sufficient performance tests during commissioning.
 - Lack of verification of the as-built models as part of feedback loop.
 - Lack of adequate benchmarking of models (e.g. positive sequence phasor domain (PSPD) and electromagnetic transient (EMT) models) against each other and real product performance.

Without taking advantage of the opportunities for improvement summarized above to enhance NERC reliability standards in complement with the FERC GIA/GIP, large disturbances involving non-consequential tripping of many IBRs or other abnormal power changes from IBRs will continue with increased frequency and likelihood, subsequently increasing risks to BPS reliability. NERC continues to highlight the increased risk profile of IBRs due to the rapidly changing resource mix.

Purpose or Goal (What are the reliability gap(s) or risk(s) to the Bulk Electric System being addressed, and how does this proposed project provide the reliability-related benefit described above?):

A series of NERC disturbance reports highlight systemic performance issues that have led to unexpected IBR plant reductions during normal grid faults. For instance, phase jump or phase lock loop (PLL) synchronization issues were described as one cause of IBR plant tripping in three reports.^{3,4,5} Similarly,

³ *Odessa Disturbance*, NERC. September 2021. https://www.nerc.com/pa/rrm/ea/Documents/Odessa_Disturbance_Report.pdf

⁴ *2022 Odessa Disturbance*, NERC. Atlanta, GA: December 2022.

https://www.nerc.com/comm/RSTC_Reliability_Guidelines/NERC_2022_Odessa_Disturbance_Report%20%281%29.pdf

⁵ *900 MW Fault Induced Solar Photovoltaic Resource Interruption Disturbance Report*, NERC. Atlanta, GA: February 2018.

<https://www.nerc.com/pa/rrm/ea/October%209%202017%20Canyon%20%20Fire%20Disturbance%20Report/900%20MW%20Solar%20Photovoltaic%20Resource%20Interruption%20Disturbance%20Report.pdf>

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other reports describe tripping causes that include overvoltage,⁶ undervoltage,⁷ frequency protection,⁸ momentary cessation,⁹ and slow active power recovery,¹⁰ among other causes.

The purpose of this Standards project is to address the reliability risks presented to the BPS due to the observed systemic deficiencies in IBR performance and modeling. These performance deficiencies could be mitigated by taking advantage of the above-mentioned opportunities for improvement to enhance generator interconnection requirements and study processes through enhancements to FAC-001 and FAC-002. Deficiencies observed by NERC in numerous disturbance reports and other NERC publications show that Transmission Owners (TOs) have a need to enhance their publicly available generator interconnection requirements, as required in FAC-001, with uniform and comprehensive requirements. Additionally, enhancements to generator interconnection study processes, including conformity assessment processes for IBRs connecting to the BPS (i.e., all registered IBRs), are paramount to ensure reliable IBR operation and to prevent large disturbance events during normally cleared BPS events. Conformity assessments are intended to leverage existing skillsets within a more structured process with well-defined success criteria. Opportunities to improve generator interconnection requirements and conformity assessments¹¹, in the aforementioned technical areas and others, must be capitalized upon to prevent future unexpected IBR plant tripping risks that could compromise system reliability. Furthermore, insufficient commissioning practices have led to many facilities having protection, control settings, or control modes installed that were not studied as part of the generator interconnection process and going unnoticed until a major grid disturbance occurs.

This proposed project intends to address the reliability issues identified in the NERC disturbance reports by accomplishing the following:

1. Enhancing the latest FAC-001 Standard, in complement with FERC Order No. 2023 and FERC GIA/GIP to require that TOs in coordination with their associated Transmission Planners (TP) and Planning Coordinators (PC) establish IBR performance requirements covering specific topics of paramount importance for BPS reliability while leveraging technical aspects of work already completed within the industry.
2. Enhancing the latest FAC-002 Standard, in complement with FERC Order No. 2023 and FERC GIA/GIP to require TPs and PCs to enhance their generation interconnection study processes to assess in more detail IBR plant capability and performance conformity for example through a

⁶ *April and May 2018 Fault Induced Solar Photovoltaic Resource Interruption Disturbances Report*, NERC. Atlanta, GA: January 2019. https://www.nerc.com/pa/rrm/ea/April_May_2018_Fault_Induced_Solar_PV_Resource_Int/April_May_2018_Solar_PV_Disturbance_Report.pdf

⁷ *Panhandle Wind Disturbance*, NERC. Atlanta, GA: August 2022. https://www.nerc.com/pa/rrm/ea/Documents/Panhandle_Wind_Disturbance_Report.pdf

⁸ *Multiple Solar PV Disturbances in CAISO*, NERC. April 2022. https://www.nerc.com/pa/rrm/ea/Documents/NERC_2021_California_Solar_PV_Disturbances_Report.pdf

⁹ *1,200 MW Fault Induced Solar Photovoltaic Resource Interruption Disturbance Report*, NERC. June 2017. https://www.nerc.com/pa/rrm/ea/1200_MW_Fault_Induced_Solar_Photovoltaic_Resource_Interruption_Final.pdf

¹⁰ *San Fernando Disturbance*, NERC. November 2020. https://www.nerc.com/pa/rrm/ea/Documents/San_Fernando_Disturbance_Report.pdf

¹¹ <https://www.iec.ch/conformity-assessment/what-conformity-assessment>

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combination of review of documentation, simulation studies, and physical tests that a newly interconnecting IBR complies with applicable IBR performance requirements.

3. Modifying either FAC-001 or FAC-002 , in complement with FERC Order No. 2023 and FERC GIA/GIP, to include requirements for applicable entities (TOs, TOPs, Balancing Authority (BA), etc.) to enhance existing generator interconnection requirements and study practices, to include requirements for Generator Owners (GO) to appropriately and reliably commission IBR facilities and provide adequate proof that commissioning checks (i.e., as-built evaluation, commissioning testing, etc.) were conducted and that the as-built IBR plant is parameterized to represent the latest revision of the as-modeled IBR facility used in generator interconnection studies.

Reliability-related benefits of each of the above proposals are further clarified below.

Language in the latest FAC-001 Standard requires a TO to document Facility Interconnection Requirements, update them as needed, and make them available upon request; however, there is no specificity regarding what the requirements should entail. Some entities rely heavily or entirely on high-level requirements established in the *pro forma* LGIA and have not expanded upon these requirements. NERC Reliability Standards should operate in complement with FERC Order No. 2023 and FERC GIA/GIP and modernize and enhance requirements and study processes associated with IBRs. NERC disturbance reports highlight repeated causes of tripping that are not captured by existing requirements in the FERC GIA/GIP, nor should industry rely solely on these procedures for the establishment of performance-based requirements. This SAR proposes the enhancement of existing interconnection requirements and study processes through the inclusion of specific categories of requirements (i.e., voltage ride-through, fault ride-through performance, validation between models and installed equipment, etc) in FAC-001. These requirements must be coordinated with current and future NERC Standards, FERC Order No. 2023 and FERC GIA/GIP, and existing generator interconnection requirements. Having a uniform minimum set of generator interconnection requirement categories across North America outlined throughout NERC Reliability Standard requirements will help ensure clarity and consistency among equipment manufacturers, IBR developers, GOs, and TOs, and lead to new BPS-connected IBR plants designed with the capabilities necessary for reliable operation of the BPS.

Currently, the latest version of FAC-002 requires TPs and PCs to study the reliability impact of interconnecting generation and existing generation seeking to make a qualified change, as defined by the PC under requirement R6. There is currently no requirement to ensure that these generators, as-designed and as-installed or to-be-installed in the field, are assessed for compliance with applicable interconnection requirements (as created per FAC-001) during the interconnection process. Having a specific conformity assessment process (as enhancements to currently performed interconnection studies) will help ensure that the TP and PC verify generating resource conformity with applicable interconnection requirements, preferably prior to IBR plant commissioning. The standard drafting team should leverage FERC GIA/GIP requirements to determine sufficient timelines for resolving discrepancies in plant conformity. Enhancing current generator interconnection processes with clear conformity

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assessment processes will ensure that new BPS-connected IBR facilities are designed with the capabilities necessary for reliable operation.

Lastly, IBR facility commissioning deficiencies have been documented numerous times by NERC in disturbance reports, alert findings, and other publications. Entities must adhere to both FERC Orders and FERC GIA/GIP throughout the generator interconnection processes, and NERC Standards that become subject to mandatory enforcement only upon commercial operation. Therefore, there is a handoff that occurs between the developer and GO, as well as between the FERC GIA/GIP and the NERC Standards. Because of these technically sensitive issues and the urgency to connect renewable energy resources to the BPS due to policies, tax credits, economics, etc., IBR interconnection is under intense pressure to be completed as quickly as possible. Therefore, there is a need to focus on the quality of commissioning and assurance that the as-built or to-be-built facility is consistent with the latest revision of the models used in generator interconnection studies conducted during the generator interconnection process and to reduce the risk of expected performance during real-time operations. To help ensure reliable operation of the BPS, as-built evaluation and commissioning requirements should be created to help ensure that the IBR will operate as expected and studied and that sufficiently documented proof of compliance has been provided to applicable TOs and TPs.

Project Scope (Define the parameters of the proposed project):

This project will modify the latest versions of NERC FAC-001 and FAC-002, while ensuring alignment and complement with FERC Order No. 2023 and FERC GIA/GIP. The scope of the project is to modify NERC Standards to:

- 1) Include specific IBR interconnection topics in FAC-001-4 for which generator interconnection requirements shall be defined by TOs/TPs
- 2) Include specific steps for a conformity assessment intended to assess FAC-001-4 conformity in FAC-002-4
- 3) Include requirements for TOs to include pre-commissioning requirements for GOs to provide evidence that the facility:
 - a. Successfully passes an evaluation with performance that meets commissioning requirements. Discrepancies between plant performance and commissioning requirements should be shared with associated TP and PC to ensure visibility into the discrepancies and mitigation actions.
 - b. Ensure that the parameters and control modes intended to be placed in-service produce performance that matches the performance of the as-designed plant model that was used in generator interconnection studies.
- 4) IBR control parameter updates that affect the performance of the facility, made during the commissioning process, are updated in the facility model and studied to ensure reliability

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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 justification¹² of developing a new or revised Reliability Standard or definition, which includes a discussion of the risk and impact to reliability-of the BES, and (2) a technical foundation document (e.g., research paper) to guide development of the Standard or definition):

The proposed project will produce the following deliverables: modifications to the latest FAC-001 and modifications to the latest FAC-002 while ensuring alignment and complement with FERC Order No. 2023 and GIP.

NERC FAC-001-4 Enhancements to the requirement R1:

- Each TO shall document enhanced Facility Interconnection Requirements for IBR, in coordination with their TP, PC, and affected TOs, update them as needed and make them available upon request. IBR facilities generator interconnection requirements shall, at a minimum, include some or all the following scope leveraged from existing industry standards, NERC Standards and other NERC Publications, and other industry works. The Standard Drafting Team shall ensure coordination with FERC Order 901 and FERC GIA/GIP, already-approved NERC Standards, Standards currently under development, and consider region-specific reliability concerns and processes to allow variances to certain requirements if necessary to ensure BPS reliability.
 - General generation interconnection technical specifications and performance requirements
 - Reference points of applicability (e.g., specifying¹³ where the interconnection requirements apply, e.g., point of interconnection)
 - Applicable voltages and frequencies (e.g., specifying the meaning of voltage and frequency for each of the following interconnection requirements (e.g., phase or instantaneous values, etc.))
 - Measurement accuracy (e.g., specifying the accuracy of steady state and transient measurement, accuracy requirements for an IBR Facility's performance monitoring and validation)
 - Operational measurement and communication capability (e.g. specifying communication capabilities required from an IBR Facility for providing real-time operational information)
 - Control capability requirements (e.g., specifying the capability of an IBR Facility to respond to external control inputs, e.g., capability to limit active power as specified by a TO)
 - Prioritization of IBR responses (e.g., specifying the priority of IBR Facility responses to TO's interconnection requirements)
 - Isolation device (e.g., specifying the requirement for break isolation device between the TO's network and the IBR Facility)

¹² 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.

¹³ For the purpose of this document, specifying means developing or referring to a requirement within a certain category.

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- Inadvertent energization of the transmission system (e.g., specifying requirements for IBR Facility, when the TO's network is de-energized)
- Enter service (e.g., specifying requirements for IBR Facility performance when entering service after an IBR Facility was out of operation)
- Interconnection Integrity (e.g., specifying protection from electromagnetic interference, surge-withstand performance, and interconnection switchgear)
- Integration with transmission system grounding (e.g., specifying requirements for the integration of grounding scheme between an IBR Facility and TO's network)
- Reactive power-voltage control requirements within the continuous operation region
 - Reactive power capability (e.g., specifying reactive power capability at the reference point of applicability)
 - Voltage and reactive power control modes (e.g. specifying voltage regulation capability by changing reactive power output, and voltage control modes during normal operation)
- Active power and frequency response requirements
 - Primary frequency response (e.g., specifying requirements for the primary frequency response)
 - Fast frequency response (e.g., specifying requirements for any fast frequency response, i.e., response to changes in frequency during the arresting phase of a frequency excursion to improve the frequency nadir or initial rate-of-change of frequency)
 - Active power ramp rate performance (e.g., specifying performance requirements for active power ramping. Alternatively, this requirement can be embedded in other performance requirements (e.g., Enter Service, Primary Frequency Response Requirement, etc.) as appropriate).
- Response to transmission system abnormal conditions
 - Voltage (e.g., specifying requirements for IBR Facility performance during and after large-signal voltage disturbances, including transient overvoltage ride-through and dynamic voltage support requirements)
 - Frequency (e.g., specifying requirements for IBR Facility performance during and after a large-signal frequency disturbance, including rate-of-change of frequency and voltage phase angle ride-through requirements)
 - Return to service after an IBR plant trip (e.g., specifying requirements for IBR Facility performance if it trips during or after a large-signal voltage or frequency disturbance)
- Protection (defining requirements for protective functions at an IBR Facility and coordination with the TO)
- Modeling Data (e.g., specifying requirements for IBR Facility models to be provided to TOs)

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- Verification Report comparing modeled parameters against to-be-commissioned parameters.
- Model Validation report showing benchmarking between all submitted model types (Standard Library Model, Positive Sequence User-defined model, and Electromagnetic Transient (EMT)) model and the real equipment as per FERC Order 2023¹⁴
- Measurement data for performance monitoring and validation (e.g., specifying measurements, data recording, and retention requirements at an IBR Facility for the purpose of performance monitoring and validation during an IBR Facility operation)
- Test and verification requirements (e.g., specifying requirements for testing and verifying an IBR Facility's conformity with applicable interconnection requirements during the interconnection process, at the commissioning stage, and during IBR Facility operation)

NERC FAC-002-4 Enhancements:

- Additional requirement: TPs and PCs shall develop the process for assessment and assess conformity with applicable interconnection requirements (as per FAC-001-4) for interconnecting IBR facilities and existing IBR facilities seeking to make a qualified change as defined by the Planning Coordinator under requirement R6. The SDT should reference the FERC GIA/GIP to ensure alignment when determining appropriate timelines for generator interconnection processes milestones along with the submission of qualified changes, updated models, model documentation, and test reports. The assessment may include physical testing such as factory testing or simulation-based assessment using detailed, representative models of the IBR facility that will be built in the field. Entities that implement physical testing requirements should also create requirements under FAC-001 that specify the data and measurements needed to be recorded during physical tests. These assessment processes should again leverage the work being done in the IEEE P2800.2 working groups.
- The Standard Drafting Team shall ensure coordination with FERC Order 901 and NERC Standards under development or currently subject to mandatory enforcement.

IBR Facility Commissioning Enhancements:

- New requirements created by applicable entities that require the GO of a registered IBR facility provide adequate proof that the facility was commissioned reliably.
- Documentation to the TO, Transmission Operator (TOP), TP, PC, Reliability Coordinator (RC), and BA regarding commissioning checks related to protection and control systems as well as plant capability.
- Documentation that the commissioned in-service facility matches the model used during the interconnection process. Any discrepancies should be identified and reported to the ERO

¹⁴ [E-1 | Order 2023 | RM22-14-000 | Federal Energy Regulatory Commission \(ferc.gov\)](#)

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<p>Enterprise and the aforementioned transmission entities for corrective action as needed. (NOTE: As-built settings, controls, or protections that do not match what was studied during the interconnection process present serious adverse BPS reliability impacts, leaving the TOP, RC, and BA operating the system in an “unknown operating state” since grid performance cannot be predicted.)</p>
<p>Cost Impact Assessment, if known (Provide a paragraph describing the potential cost impacts associated with the proposed project):</p>
<p>The exact costs for this project are unknown. Near-term and long-term costs are likely to increase as industry develops practices around IBR interconnection requirements and conformity assessment. GOs will need to familiarize themselves with newly developed and implemented interconnection requirements, procure equipment, and design IBR facilities in conformity with these. They will also need to do their own IBR Facility design evaluation to verify the IBR Facility’s conformity with applicable interconnection requirements. TOs will need to develop IBR interconnection requirements, leveraging existing Standards insofar possible. TPs and PCs will need to develop conformity assessment and testing practices. Additionally, more testing and study work will be added during the interconnection process in order to conduct the conformity assessment, which will demand engineering staff’s time and result in increased costs of interconnection studies overall. These initial costs may lead to reduced transmission expansion costs, as increased IBR performance and modeling should lead to a more efficient use of the transmission system.</p> <p>These costs are recognized; however, the team has made a focused and concerted effort to minimize costs while achieving the necessary reliability outcomes for this project. Additionally, added time costs due to added study work may necessitate adjustments to IBR interconnection timelines. Outcomes from this project will help ensure an adequate level of reliability for the BPS significantly outweighs the incremental costs of implementation from this proposed project.</p>
<p>Please describe any unique characteristics of the BES facilities that may be impacted by this proposed Standard development project (e.g., Dispersed Generation Resources):</p>
<p>New BPS-connected IBR facilities and existing BPS-connected IBR facilities seeking to make a qualified change as defined by PC under requirement R6 of FAC-002-4 will be directly impacted as the Facility will need to be designed in conformity with the newly implemented interconnection requirements.</p>
<p>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 NERC Rules of Procedure Appendix 5A:</p>
<p>This section presents two questions, and therefore the IRPS will address each separately.</p> <ol style="list-style-type: none"> 1) Appropriate drafting team members could involve individuals from the following entities: TOs, TPs, PCs, GOs, OEMs, IBR commissioning contractors or consultants, TOPs, RCs, BAs 2) The proposed Standards changes should apply to the following: TOs, TPs, PCs, GOs

Requested information	
Do you know of any consensus building activities ¹⁵ in connection with this SAR? If so, please provide any recommendations or findings resulting from the consensus building activity.	
This SAR was developed by the NERC IRPS, which is a consensus building stakeholder group under the NERC RSTC. Upon endorsement by the NERC Reliability and Security Technical Committee (RSTC) through its stakeholder process and associated industry comment periods, the IRPS submits this SAR with that consensus building as well.	
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 2023-05 is currently working on modifications to both FAC-001-4 and FAC-002-4 but modifications focus on distributed resources and not IBR. This SAR helps meet the goals of FERC Order 901 and thus should be coordinated with ongoing NERC Order No. 901 activities.	
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 with the benefits of using them.	

Reliability Principles	
Does this proposed Standard development project support at least one of the following Reliability Principles ()? Please check all those that apply.	
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.
<input type="checkbox"/>	5. facilities for communication, monitoring and control shall be provided, used, and maintained for the reliability of interconnected bulk power systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber-attacks.

Market Interface Principles	
Does the proposed Standard development project comply with all of the following Market Interface Principles ?	
1. A reliability Standard shall not give any market participant an unfair competitive advantage.	Enter (yes/no) Yes

¹⁵ 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.

Market Interface Principles	
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
<i>e.g.</i> , NPCC	

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SAR Status Tracking (Check off as appropriate).	
<input type="checkbox"/> Draft SAR reviewed by NERC Staff	<input type="checkbox"/> Final SAR endorsed by the SC
<input type="checkbox"/> Draft SAR presented to SC for acceptance	<input type="checkbox"/> SAR assigned a Standards Project by NERC
<input type="checkbox"/> DRAFT SAR approved for posting by the SC	<input type="checkbox"/> SAR denied or proposed as Guidance document
Risk Tracking.	
<input type="checkbox"/> Grid Transformation	<input type="checkbox"/> Energy Policy
<input type="checkbox"/> Resilience/Extreme Events	<input type="checkbox"/> Critical Infrastructure Interdependencies
<input type="checkbox"/> Security Risks	

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
3	February 22, 2019	Standards Information Staff	Added instructions to submit via Help Desk
4	February 25, 2020	Standards Information Staff	Updated template footer

5	August 14, 2023	Standards Development Staff	Updated template as part of Standards Process Stakeholder Engagement Group
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