

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:	MOD-031-3 — Demand and Energy Data		
Date Submitted:	06/27/2023		
SAR Requester			
Name:	Shayan Rizvi, NPCC (NERC SPIDERWG Chair) John Schmall, ERCOT (NERC SPIDERWG Vice-Chair)		
Organization:	The NERC System Planning Impacts of DER Working Group (SPIDERWG)		
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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 type="checkbox"/> Variance development or revision	<input type="checkbox"/> Other (Please specify)
<input checked="" type="checkbox"/> Revision to Existing Standard			
<input checked="" type="checkbox"/> Add, Modify or Retire a Glossary Term			
<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"/> Enhanced Periodic Review Initiated	<input checked="" type="checkbox"/> Industry Stakeholder Identified
<input type="checkbox"/> Emerging Risk (Reliability Issues Steering Committee) Identified			
<input type="checkbox"/> Reliability Standard Development Plan			
Industry Need (What Bulk Electric System (BES) reliability benefit does the proposed project provide?):			
<p>MOD-031-3 seeks to “provide authority for applicable entities to collect Demand, energy and related data to support reliability studies and assessments and to enumerate the responsibilities and obligations of requestors and respondents of that data.” The SPIDERWG has recently recommended in the <i>White Paper: SPIDERWG NERC Reliability Standards Review</i>¹ that MOD-031-3 should be revised to allow for the PC to obtain existing and forecasted DER information from DPs or TPs. The TP should have the ability to act as an intermediary to provide data from DPs to the PC.</p>			

¹ Available here: https://www.nerc.com/comm/RSTC_Reliability_Guidelines/Whitepaper_SPIDERWG_Standards_Review.pdf

Requested information

Purpose or Goal (How does this proposed project provide the reliability-related benefit described above?):

The purpose of this SAR is to revise and modify MOD-031-3 in the “Requirements and Measurements” section so that PC are allowed to obtain existing and forecasted DER information from DPs or TPs. This project’s goal is to ensure that various forms of historical and forecast Demand and energy data and information is available to the parties that perform reliability studies and assessments, and provide the authority needed to collect the applicable data.

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

SPIDERWG recommends that a Standard Drafting Team (SDT) review and modify MOD-031-3, as necessary, such that the Standard requires DPs and TPs to provide existing and forecasted DER data when the PC determines the need as it is becoming critical to know how much actual demand is on the system given the amount being served by embedded generation..

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 justification² 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):

SPIDERWG identified that standards revisions be made to MOD-031 to have specific language reflecting DERs³ and how to address them. TPs should be an intermediary to provide this data from DPs to the PC as the DER from the DP affects the existing and forecasted demand amount of the TP’s planning area as well as the TP’s projected DER capacity for their planning area. This process continues up for each TP in a PC’s planning area. Thus, to minimize double counting, the TPs should be the intermediary of DER forecast information between DPs and PCs. Because of how each entity’s forecast is dependent on the results of another, the standard should be both clear on DER and revised to ensure the PC’s need to obtain existing and forecasted gross demand is met. This process is currently not found in MOD-031-3 language and would add a separate pathway of data transfer specific to DER data.

The current structure of MOD-031 has a PC request information of entities, and this change would have the TP act as an intermediary to the DP for PC requests for existing and forecasted DER capacity information. As no reporting mechanism currently exists for DER resource owners to identify their future year interconnection date to the DP, the SDT should ensure provisions are available to DPs to share

² 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.

³ MOD-031 calls out “Demand-side Management” whose definition is “All activities or programs undertaken by any applicable entity to achieve a reduction in Demand.” A reading of this definition includes generation sources as they offset Demand, or “the rate at which electric energy is delivered to or by a system or part of a system.” The SPIDERWG review of this standard calls for greater specificity to be added to this standard.

Requested information
narrative and data projections appropriate to the data they have available. This existing and future projections is separate from the details for steady-state and stability data specifications per MOD-032-1, which is currently in update by Project 2022-02. For instance, the “monthly peak hour forecast” for DER will have a maximum active power value for the entity’s footprint, but this does not equate to the equipment active power settings covered by Project 2022-02.
Cost Impact Assessment, if known (Provide a paragraph describing the potential cost impacts associated with the proposed project):
The costs are unknown. Potentially, there will be a staffing increase to perform the forecasting; however, that cost can be on the transmission entity side of this SAR.
Please describe any unique characteristics of the BES facilities that may be impacted by this proposed standard development project (e.g., Dispersed Generation Resources):
None. This SAR specifies the addition of requirements to data exchange between PCs, TPs and DPs in addition to TPs being the intermediary between DPs and the PC. This should not have a negative impact BES facilities.
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):
Impacted: Planning Coordinator (PC), Transmission Planner (TP), Balancing Authority (BA), Resource Planner, and Distribution Providers (DP)
Do you know of any consensus building activities ⁴ in connection with this SAR? If so, please provide any recommendations or findings resulting from the consensus building activity.
This SAR has been submitted through the RSTC and has been vetted by the SPIDERWG membership. The SPIDERWG also coordinated with the Reliability Assessment Subcommittee under the RSTC as MOD-031 impacts their ability to perform assessments. Their review is incorporated in the scoping sections of this SAR. The SPIDERWG membership includes BAs, RCs, TOs, TPs, TOPs, PCs, and DPs. The SPIDERWG recommended this standard be revised in <i>White Paper: SPIDERWG NERC Reliability Standards Review</i> .
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)?

⁴ 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

Project 2022-02 is currently defining DER, which can be used in this standard for current and projected capacity information under MOD-031. As Project 2022-02⁵ is currently defining the term “DER”, the SDT should define the term “DER” in the NERC Glossary of Terms if Project 2022-02 does not produce a term in the NERC Glossary of Terms as part of its final project

Project 2022-02 covers the steady-state and dynamics data requirements pertaining to DERs, while this SAR is proposing a project to cover current and forecasted capacity projections for DERs. This SAR does not propose to link the two outside of using common definitions in the NERC Glossary of Terms for DERs.

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.

The SPIDERWG considered Standards revisions alongside compliance implementation guidance and reliability guidelines. Neither compliance implementation guidance nor reliability guidelines were determined to be sufficient by SPIDERWG in their consensus-based white paper above.

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.

<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 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.

⁵ Project Page available here: <https://www.nerc.com/pa/Stand/Pages/Project2022-02ModificationstoTPL-001-5-1andMOD-032-1.aspx>

Reliability Principles

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 ?	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
None	N/A

For Use by NERC Only

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

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