

Agenda

Board of Trustees Meeting

February 22, 2024 | 4:30-5:00 p.m. Eastern
Hybrid Meeting

Attendee WebEx: [Join Meeting](#)

Introduction and Chair's Remarks

[NERC Antitrust Compliance Guidelines](#)

Agenda

1. Proposed Revisions to the Rules of Procedure to Address Unregistered IBRs* – **Approve**
2. Closing Remarks and Adjournment

*Background documents included.

Proposed Revisions to the NERC Rules of Procedure – Registration

Action

Approve

- **Appendix 2 (Definitions)**

[Clean](#)

[Redline to last approved](#)

- **Appendix 5A (Organization Registration and Certification Manual)**

[Clean](#)

[Redline to last approved](#)

- **Appendix 5B (Compliance Registry Criteria)**

[Clean](#)

[Redline to last approved](#)

Follow-Up

The *Proposed Revisions to the NERC Rules of Procedure – Registration* item was deferred from the February 15, 2024, Board of Trustees (Board) Open Meeting to provide additional time for debate and for the Board to consider additional perspectives on this matter.

At the February 15 Board Open Meeting, NERC staff presented three alternatives that were considered to register inverter-based resources (IBR). Those alternatives were:

- Modify the definition of Bulk Electric System (BES) to include these new resources;
- Add new registration function (Generator Owner (GO) IBR, Generator Operator (GOP) IBR); and
- Modify existing GO and GOP criteria (with categories).

To choose which alternative to pursue, NERC staff proposed criteria to determine the optimal path forward. These criteria were:

1. Minimize impact to standards development;
2. Fastest time to implement the approach;
3. Minimize burden on registered entities; and
4. Minimize burden on ERO registration staff.

NERC staff explained the complication involved in changing the definition of the BES. In addition to potentially being a lengthy process, it was pointed out that there may be unintended consequences beyond the GO and GOP functions. At the meeting participants indicated that some contractual obligations may be tied to the definition of the BES, further complicating the ability of industry to obtain consensus.

For adding a new registration function (GO IBR, GOP IBR), it was noted that existing GO/GOPs with IBRs would need to register for this new duplicative function, to the extent that they have facilities that meet GO/GOP IBR criteria. It was noted by some industry participants that adding the new functions would add clarity for compliance obligations. This would come at the expense of additional standards development burden and would jeopardize the ability to meet the Federal Energy Regulatory Commission (FERC) IBR Order requiring the registration of the non-BES IBRs and having standards applicable to them by May 2026.

After careful consideration of the options, and consideration of input provided at the February 2024 MRC and Board meetings, NERC staff recommends that the Board approve the changes to the Rules of Procedure as presented at the February 15, 2024 Board Open Meeting.

Background

On November 17, 2022, FERC directed NERC to submit a work plan describing how it plans to identify and register owners and operators of IBRs that are connected to and have a material impact in the aggregate on the bulk power system (BPS), but are not currently required to register with NERC under the BES definition.¹ On February 15, 2023, as amended in March 2023, NERC filed a Work Plan outlining concepts and milestones to achieve that directive.

On May 18, 2023, FERC accepted the Work Plan. NERC has filed Work Plan updates every 90 days thereafter. NERC posted its proposed revisions to Appendices 2, 5A, and 5B of the NERC Rules of Procedure (ROP) for a 45-day public comment period between September 13 – October 30, 2023. The substance of NERC's proposal is consistent with the Work Plan filings and the September 13th posting, although NERC has improved the organizational structure and made other clarifying edits in response to comments. NERC appreciates stakeholder feedback and participation throughout this ROP development process.

Summary

NERC staff thanks stakeholders for their support throughout this project to address registration of owners and operators of materially impactful BPS-connected, non-BES, IBRs in accordance with FERC directive. Stakeholder feedback throughout the November 2022 – January 2023 time period has been integral to shaping this proposal before the Board. We look forward to continuing to work together on this initiative.

The following revisions would expand the GO and GOP Registry Criteria to address unregistered IBRs and make other conforming changes. In particular, the ERO Enterprise would expand the Registry Criteria for GO and GOP to require registration of entities that own or operate: non-BES inverter based generating resources that have an aggregate nameplate capacity of greater than or equal to 20 MVA connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV. These new entrants would become category 2 GOs or GOPs. In response to Comments on the September posting, and as discussed below, NERC's proposal revises the organization of its draft to integrate the Registry Criteria updates directly into the GO/GOP criteria rather than using the GO-IBR or GOP-IBR nomenclature.²

¹ *Registration of Inverter-Based Resources*, 181 FERC ¶ 61,124 (2022) (Registration Order); and *Order Approving Registration Work Plan*, 183 FERC ¶ 61,116 (2023) (Work Plan Approval Order). Please see Docket No. RD22-4 *et. al.* for the full record in this proceeding.

² There are also updates to the definition of Reserve Sharing Group and Board of Trustees Compliance Committee Definition to align with other changes.

NERC takes this opportunity to also clarify that the proposed revisions do not affect distributed energy resources, synchronous resources, or IBRs which in aggregate would not have a material impact on reliability of the BPS. The materiality thresholds embedded in the proposed Registry Criteria updates were carefully tailored with the help of stakeholders to only affect impactful BPS-connected IBR resources in accordance with FERC directive. The proposed revisions would also not alter the BES Definition or Reliability Standards. While NERC anticipates that if the Board (and thereafter FERC) approve the ROP revisions, there would be a Glossary alignment Standards project, such a project and any others (including those pursued in accordance with FERC Order No. 901) will all proceed in accordance with Appendix 3A of the ROP (the Standards Process Manual). NERC looks forward to collaborating with stakeholders on those Standards projects.

As a result, NERC proposes the following revisions to Appendix 2 (Definitions), Appendix 5A (Organization Registration and Certification Manual), and Appendix 5B (Statement of Compliance Registry Criteria):

Appendix 2 – Definitions

GO and GOP Definitions: To align the ROP definitions for these functions with the revisions proposed to Appendix 5B (Statement of Registry Criteria), NERC proposes include an insert that mirrors the GO/GOP Registry Criteria update in Appendix 5B.

Reserve Sharing Group (RSG) Definition: For alignment, NERC proposes to revise the RSG definition to mirror the revised definition being proposed in Project 2022-01 Reporting ACE Definition and Associated Terms. Incorporating these revisions would support administrative efficiency.

Board of Trustees Compliance Committee Definition: NERC proposes to reflect those references to the “Board of Trustees Compliance Committee,” “BOTCC” or “Compliance Committee” means the Compliance Committee of the NERC Board of Trustees or its successor. This supports NERC’s recent updates to its governance model establishing the Regulatory Oversight Committee (ROC) as the successor to the BOTCC in an administratively efficient manner (rather than replacing BOTCC with ROC everywhere that it might appear within the ROP).

Appendix 5A – Organization Registration and Certification Manual

Facilities terminology: Changing “Facilities” throughout to “facilities” to reflect NERC’s scope of authority to register entities that own, operate, or use BPS assets consistent with the revisions in Appendix 5B and NERC’s jurisdiction pursuant to section 215 of the Federal Power Act over users, owners, and operators of the BPS.

Section VI: NERC has included clarifying language that *de novo* review applies to the BOTCC review of Registration appeals. This would clarify that per existing practice *de novo* review is applied to Registration appeals.

Appendix 5B – Statement of Compliance Registry Criteria

GO / GOP Registry Criteria: NERC proposes to revise GO and GOP Registry Criteria to include a new category. These functions would address registration of the entity that i) owns and maintains or ii) operates non-BES inverter-based generating resources that have an aggregate nameplate capacity of greater than or equal to 20 MVA delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV. As described in Docket No. RD22-4,

through several assessments, event reports, and studies, NERC has determined that organizations which own or operate unregistered IBRs that i) aggregate to nameplate capacity equal or greater than 20 MVA; at ii) a common point of connection at a voltage greater than or equal to 60 kV, are material to the Reliable Operation of the interconnected BPS.³ In response to comments on NERC's September 13th posting, NERC revised its proposal to reflect updates to the GO and GOP Registry Criteria directly rather than creation of associated GO-IBR and GOP-IBR functions. This clarification should avoid concerns regarding duplicative registration or compliance monitoring and enforcement for entities with more than one registered function associated with resource ownership or operation. This structure (consistent with the filed Work Plan and updates) is also anticipated to be a helpful foundation conceptually for future Reliability Standards projects.

RSG Registry Criteria: NERC proposes to revise the RSG function definition to be consistent with the revised definition being proposed in Project 2022-01. Including this update as part of the ROP Registry Criteria revisions would support administrative efficiency.

Introductory Materials: NERC has removed portions of the legislative history from the background portions of Appendix 5B. This would eliminate legacy information that is no longer necessary for understanding the Registry Criteria.

Conforming changes: NERC proposes to revise the Registry Criteria to remove duplicative information, clarify Section I of the Criteria to make clear that owners, operators, or users of the BPS are candidates for Registration.

Determination of Material Impact Notes: In response to comments on the September 13th posting, NERC has updated these notes on materiality review to ensure clarity that the NERC-Led Review Panel process would be available to category 2 GOs and GOPs. This is important to clarify the availability of this process to all registered entities.

Development Process

As detailed in Work Plan Updates and reflected on NERC's website, NERC engaged in extensive stakeholder outreach as it considered approaches to address unregistered IBRs as directed by the Commission.⁴ Prior to posting the proposal for public comment, for example, NERC hosted an informational webinar on July 12, 2023. NERC posted the proposed ROP revisions on its webpage from September 13, 2023 through October 30, 2023. The posting included a clean and redline of ROP Appendices 2, 5A, and 5B, as well as a summary document detailing the revisions and justifications.

In parallel with the posting, NERC also issued a series of supporting materials to aid in understanding. These materials included a summary of the proposed revisions, an overview of frequently asked questions, a quick reference guide for new candidates, and a webinar as part of the IBR webinar series.

³ ERO Enterprise BPS Resource Trends Task Force, *Analysis of the Changing Mix of Generating Resources on the BPS* (Feb. 2023), available as Attach. 2 of NERC's work plan filing. *N. Am. Elec. Reliability Corp.*, (Feb. 15, 2023) Docket No. RD22-4-000, https://www.nerc.com/FilingsOrders/us/NERC%20Filings%20to%20FERC%20DL/IBR%20Registration%20Work%20Plan_final.pdf

⁴ See, e.g., North Am. Elec. Reliability Corp., Docket No. RD22-4-001, (November 14, 2023) (Work Plan Update #2) (including a description of outreach activities).

The proposed revisions align with the anticipated elements laid out in stakeholder meetings, the Work Plan Filing, and Work Plan filing updates, with clarifications based on stakeholder comment.

Minority Issues

Some commenters prefer establishing a wholly new function for category 2 GOs / GOPs, on the basis that it would be clearer. While NERC appreciates this feedback, after carefully evaluating this approach in the context of all comments submitted on the September posting, NERC determines that directly modifying the GO/GOP Registry Criteria will be clearer and avoid potentially duplicative registered functions and associated compliance monitoring and enforcement concerns. Reliability Standards revisions would be necessary in the future under NERC's proposed approach or a wholly new function.⁵

Staff's consideration of minority issues is reflected in the posted [Consideration of Comments](#).

Pertinent FERC Directives

In the Registration Order, FERC determined as a result of evidence on the changing resource mix:

Therefore, we find that it is necessary to ensure that unregistered IBRs that may have an aggregate material impact on the reliable operation of the Bulk-Power System are required to: (1) register with NERC, and (2) comply with NERC Reliability Standards. Hence, we direct NERC, pursuant to our authority under FPA section 215,⁶ to submit for Commission approval within 90 days a work plan describing in detail how NERC plans to identify and register unregistered IBRs that, in the aggregate, have a material impact on the reliable operation of the Bulk-Power System. The work plan should explain how NERC will modify its processes to encompass unregistered IBRs (whether by working with stakeholders to change the BES definition, a change to its registration program, or some other solution) within 12 months of approval of the work plan. The work plan should also include implementation milestones ensuring that unregistered IBR owners and operators meeting the new registration criteria are identified within 24 months of the approval date of the work plan, and that they are registered and required to comply with applicable Reliability Standards within 36 months of the approval date of the work plan. The work plan will be noticed for public comment. Once the Commission approves the work plan, NERC must file updates every 90 days thereafter detailing its progress towards identifying and registering owners and operators of IBRs (e.g., the number or percentage of entities identified and/or registered and anticipated completion date if changed, with an explanation of any such change).⁷

In the Order Approving Work Plan, FERC stated:

We approve NERC's work plan to modify its Rules of Procedure and Registry Criteria to identify and register owners and operators of unregistered IBRs connected to the Bulk-

⁵ See, e.g., Order Approving Work Plan, at P 57 (stating, "Implementation details for Reliability Standard development, such as applicability, capability-based requirements, and criteria that may be used to clarify those facilities and/or components excluded from mandatory compliance obligations with specific standards and/or requirements are better addressed through NERC's standards development process. As required by the FPA, the Commission would consider whether NERC's proposed Reliability Standard is just, reasonable, not unduly discriminatory, or preferential, and in the public interest when determining whether to approve the proposed new or modified Reliability Standard.").

⁶ 16 U.S.C. 824o(b)(1). See also 18 CFR 39.2(d) (2021) (the ERO shall provide the Commission information as necessary to implement section 215 of the FPA).

⁷ Registration Order, at P 6.

Power System. We find that NERC's work plan and associated timetable address the directives set forth in the Commission's IBR Registration Order. We agree that NERC's work plan timetable with its corresponding milestones and periodic Commission updates, as well as NERC's stakeholder communication plan, should ensure an efficient process towards identifying and registering relevant entities.⁸

Additional Information

A link to project history and files is included here for reference:

[Organization Registration and Organization Certification \(nerc.com\)](#)

⁸ Order Approving Work Plan, at P 24.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Proposed Revisions to NERC Rules of Procedure – Registration

Howard Gugel, Vice President, Compliance Assurance and Registration
Candice Castaneda, Senior Counsel
Board of Trustees Meeting
February 15, 2024

RELIABILITY | RESILIENCE | SECURITY



- NERC staff analysis of IBRs in 2021-2022
- FERC IBR Order – November 17, 2022
- Work plan and white paper filed with FERC – February 15, 2023
 - Proposed ≥ 20 MW and ≥ 60 kV criteria
 - Registration changes, then Reliability Standard changes
- May 18, 2023: FERC Order approved work plan
 - Work plan updates every quarter
- Rules of Procedure changes consistent with registration criteria
- All Reliability Standard modifications will use approved Standard Processes Manual

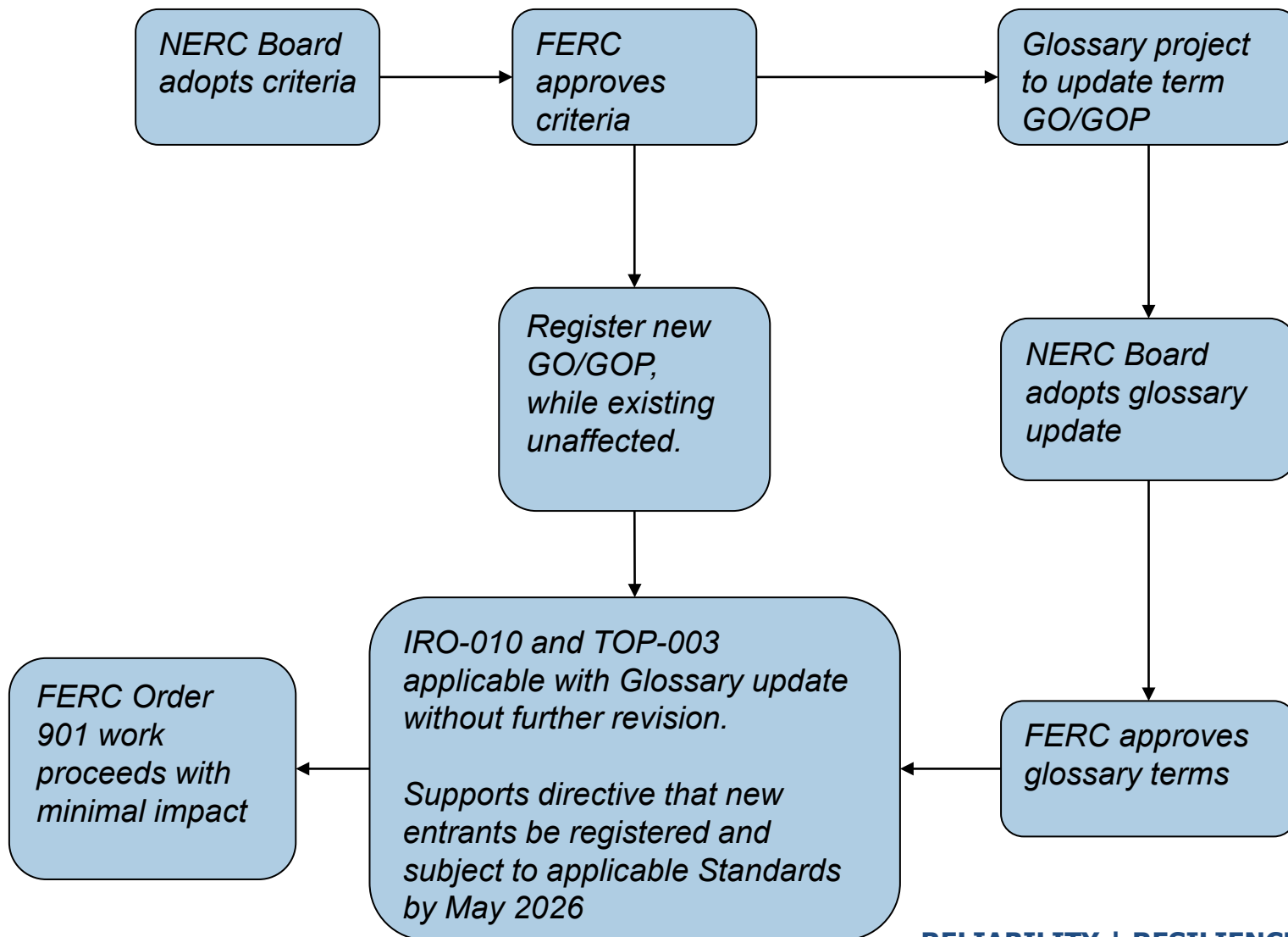
- Revision process ran from September 2023 – January 2024
- Proposed redlines posted for 45-day public comment
- Revisions made in response to comments received
- Final Version Posted: January 22, 2024
 - Consideration of Comments included in posting [Rules of Procedure \(nerc.com\)](#) and <https://www.nerc.com/pa/comp/Pages/Registration.aspx>

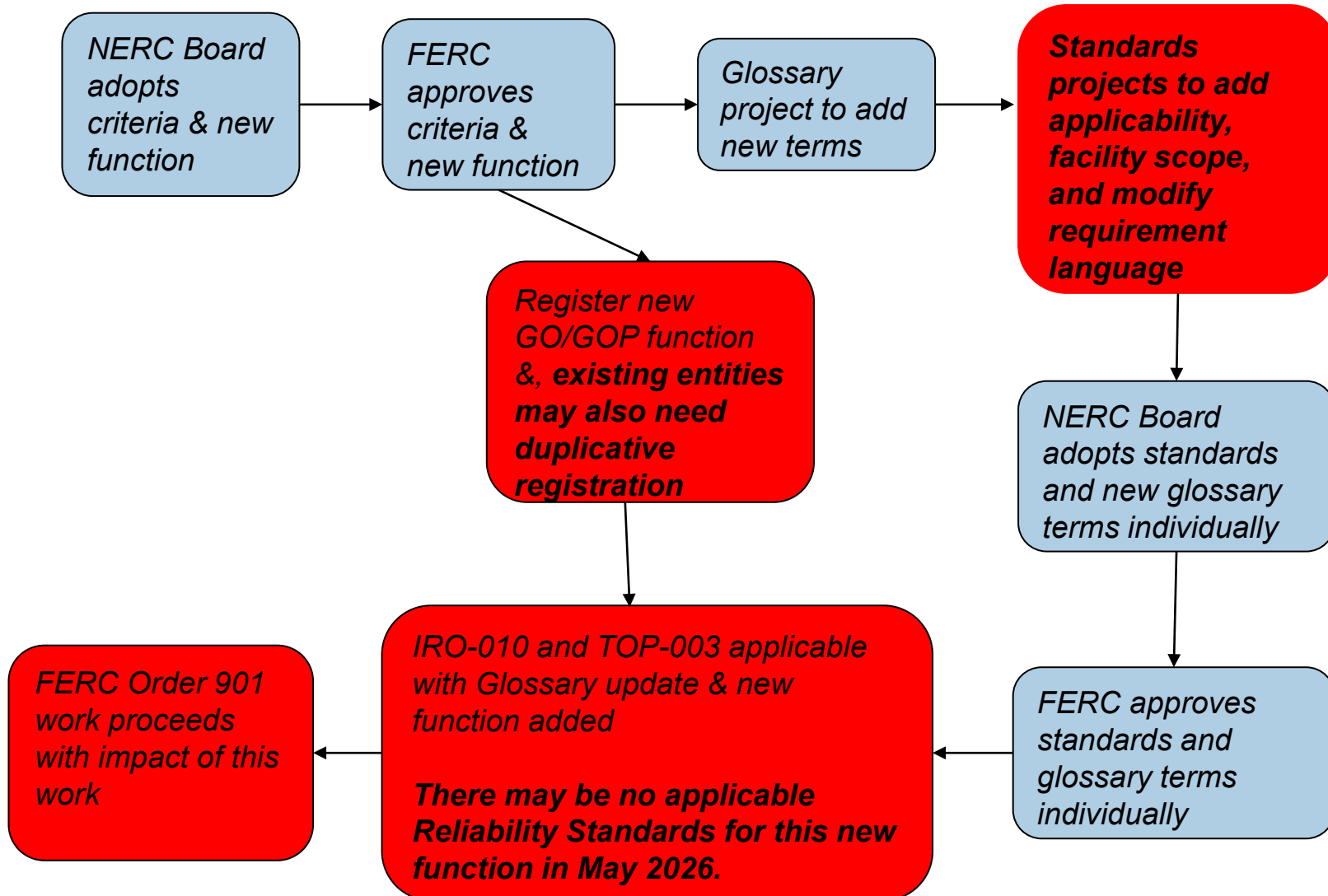
- Register entities that own or operate:
 - Non-BES IBRs with aggregate nameplate capacity ≥ 20 MVA connected at a voltage ≥ 60 kV
- Ensures 97.5% of impactful IBRs subject to Reliability Standards
- High degree of consensus on registration thresholds; comments centered on mechanics of implementation
- Proposal only affects registry criteria

- Approaches considered
 - Modify definition of BES
 - Add new registration function (GO IBR, GOP IBR)
 - Modify existing Generator Owner (GO) and Generator Operator (GOP) criteria (with categories)
- Criteria for path forward
 - Minimize impact to standards development
 - Fastest time to implement
 - Minimize burden on registered entities
 - Minimize burden on ERO registration staff

- Divided opinion in industry
- May have unintended Standards impact
- May have unintended consequences on non-GO/GOP Registered Functions
- Last BES definition project > 2 years

Modified GO/GOP Registry Criteria





Modified GO/GOP Criteria	GO/GOP IBR Function
Existing GO/GOPs unaffected. Registration database will track category(ies) to which individual GO/GOP belongs	Existing GO/GOPs with IBRs will need to register for duplicative function, to the extent that they have facilities that meet GO/GOP IBR criteria
Clearly identifies new registrants as GO/GOP	Will increase documentation burden and depart from existing registration framework
Minimizes standards modifications (only change facility applicability, requirement language unaffected)	All requirements applicable will have to be modified as well as applicable entities and facilities
By reducing number of changes, improves likelihood of a small set of Reliability Standards applicable by May 2026	Impairs likelihood of any applicable Reliability Standards for the new function by May 2026
Glossary term project	Glossary term project
Does not preclude "subset list" approach	Not needed

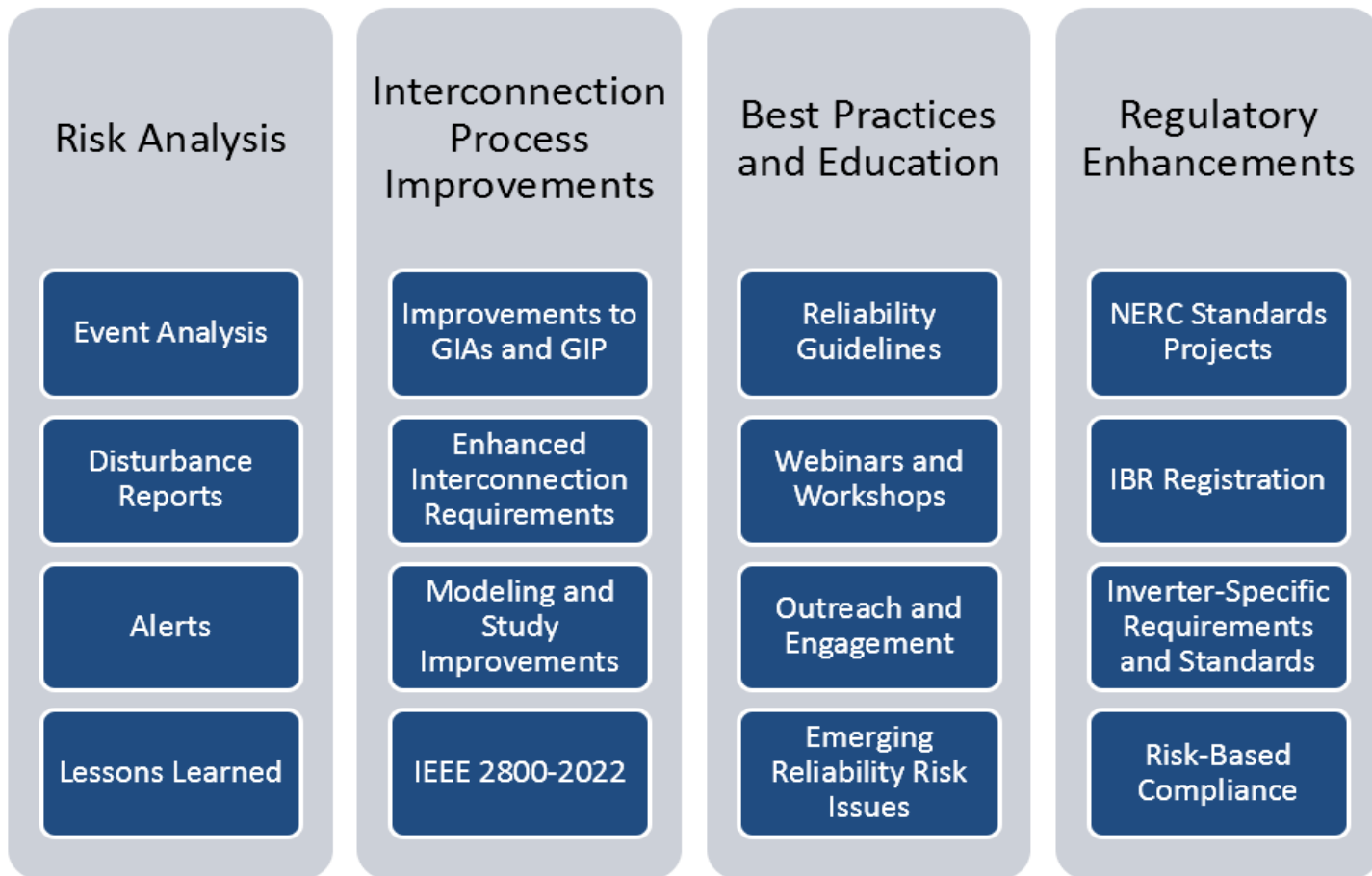
- **Modified GO/GOP Registry Criteria**
 - Glossary term project for Generator Owner and Generator Operator
 - 9 standards applicable with no further modification
 - 4 standards only applicability modification needed
 - 7 standards require modification of requirement language
- **New GO/GOP IBR Function**
 - Glossary term project for GO IBR and GOP IBR
 - 20 standards projects to modify applicability and requirement language

- Working with Communications to develop comprehensive strategy
- Existing entities
 - Use existing communication channels
 - Hold Small Group Advisory Sessions
- New Registrations
 - Education on NERC and processes
 - Encourage participation
 - Hold Small Group Advisory Sessions
 - Develop “one stop shop” for applicable standards and standards under development



Questions and Answers

Appendix



- Modified GO/GOP Registry Criteria
 - Project to modify glossary term of GO and GOP to include new criteria
 - Generator Owner - Entity that owns and maintains generating Facility(ies) **or owns and maintains non-BES inverter based generating resources that have or contribute to an aggregate nameplate capacity of greater than or equal to 20 MVA, connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV.**
- New GO/GOP IBR Function
 - Project to add glossary term for GO IBR and GOP IBR
 - Standard development project to add GO IBR and GOP IBR to Applicability and R3

- Modified GO/GOP Registry Criteria
 - Standards project to add new 4.2.1.7 in Facilities section
 - 4.2.1.7 **Non-BES inverter based generating resources that have or contribute to an aggregate nameplate capacity of greater than or equal to 20 MVA, connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV**
- New GO/GOP IBR Function
 - Standards development project to
 - add GO IBR and GOP IBR to Applicability section
 - Add 4.2.1.7 (same as above)
 - Add GO IBR and GOP IBR to R1, R2, R3 and R4

- Use language in Applicability section that restricts to BES
- Example – PRC-024-3
- Most current standards already use this language
- Could add Exemption language (like in CIP-002-5.1a 4.2.3) to further clarify

- Use language in Applicability section that lists both
 - BES generating resource(s) and
 - Non-BES inverter based generating resources that have or contribute to an aggregate nameplate capacity of greater than or equal to 20 MVA, connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV
- Example – Suggested modification of PRC-024-3 in prior slide

- Use language in Applicability section that restricts to
 - Non-BES inverter based generating resources that have or contribute to an aggregate nameplate capacity of greater than or equal to 20 MVA, connected through a system designed primarily for delivering such capacity to a common point of connection at a voltage greater than or equal to 60 kV
- Suggest this be separate standard(s) for clarity
 - Would suggest this even if using GO/GOP IBR registration
- Do not envision this being used except on rare occasions