

# Electric Energy Resources Interconnection Standards Collaborative (ISC) Industry Connections Activity Initiation Document (ICAID)

Version: 1, 17-02-2023 IC23-004-01 Approved by the CAG 22 March 2023

# Instructions

- Instructions on how to fill out this form are shown in red. Please leave the instructions in the final document and simply add the requested information where indicated.
- Spell out each acronym the first time it is used. For example, "United Nations (UN)."
- Shaded Text indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

# 1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

Name: David Narang Email Address: <u>David.narang@nrel.gov</u> Employer: National Renewable Energy Laboratory (NREL) Affiliation: NREL

Name: Jens Boemer Email Address: j.c.boemer@ieee.org Employer: Electric Power Research Institute (EPRI) Affiliation: EPRI

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# 2. Participation and Voting Model

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

Individual-Based

# 3. Purpose

#### 3.1 Motivation and Goal

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

The Interconnection Standards Collaborative (ISC) encourages collaboration across IEEE Committees managing the development of standards for the interoperability and interconnection of distributed energy resources (DERs) with the grid and the entities that reference and apply these standards. Targeted standards in scope are the IEEE 1547 series that specify technical minimum performance capabilities and functional requirements for generation and storage resources interconnected to distribution grids. The goal is to deliver IEEE 1547 standards to ready DERs with capabilities that enable future utilization with increasing DER penetrations and to support industry stakeholders in the adoption of these standards.

### 3.2 Related Work

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

There are currently no such efforts active. There is an IEEE Industry Task Force with NERC that the proposed ISC will be coordinated.

### **3.3 Previously Published Material**

Provide a list of any known previously published material intended for inclusion in the proposed deliverables of this activity.

There is no previously published material.

#### 3.4 Potential Markets Served

Indicate the main beneficiaries of this work, and what the potential impact might be.

The intended stakeholders represent various elements of the North American power system market including utilities, developers, standards development bodies, local, state and federal government entities.

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# 3.5 How will the activity benefit the IEEE, society, or humanity?

Describe how this activity will benefit the IEEE, society, or humanity.

ISC's activities will improve the timely development and adoption of IEEE standards.

Activities would focus on augmenting the coordinating role of the sponsoring SC21:

- Collecting broad stakeholder input on
  - Review of wish list for a standard / future states
  - o Market adoption conditions / regulatory reference projects
  - o Availability of SMEs, key participants, or leaders
  - Related efforts, including IEEE SA projects (standards, recommended practices, guides)
- Developing recommendations for sufficient scope and consistency in content across new, revisions, or amendments of the target standards.
- Supporting in coordination and prioritization of IEEE SA Standards Project Authorization Requests (PAR) for existing and new projects, including development of standards revision and application roadmaps as well as application and transition time frames.
- Support, coordination, and dissemination of educational materials and resources that can guide in the timely application of target standards, for example in current or upcoming state public utility commission (PUC) activities or initiatives.

# 4. Estimated Timeframe

Indicate approximately how long you expect this activity to operate to achieve its proposed results (e.g., time to completion of all deliverables).

### **Expected Completion Date:** 3/2025

IC activities are chartered for two years at a time. Activities are eligible for extension upon request and review by ICCom and the responsible committee of the IEEE SA Board of Governors. Should an extension be required, please notify the ICCom Administrator prior to the two-year mark.

# 5. Proposed Deliverables

Outline the anticipated deliverables and output from this IC activity, such as documents (e.g., white papers, reports), proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

- Roadmaps for future IEEE 1547 series published at <u>https://sagroups.ieee.org/scc21/standards/</u>
- Recommendations for future IEEE 1547 series standards PAR content and timing.

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# 5.1 Open Source Software Development

Indicate whether this IC Activity will develop or incorporate open source software in the deliverables. All contributions of open source software for use in Industry Connections activities shall be accompanied by an approved IEEE Contributor License Agreement (CLA) appropriate for the open source license under which the Work Product will be made available. CLAs, once accepted, are irrevocable. Industry Connections Activities shall comply with the IEEE SA open source policies and procedures and use the IEEE SA open source platform for development of open source software. Information on IEEE SA Open can be found at <a href="https://saopen.ieee.org/">https://saopen.ieee.org/</a>.

Will the activity develop or incorporate open source software (either normatively or informatively) in the deliverables? No

# 6. Funding Requirements

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government, or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

N/A

# 7. Management and Procedures

### 7.1 Activity Oversight Committee

Indicate whether an IEEE Standards Committee or Standards Development Working Group has agreed to oversee this activity and its procedures.

# Has an IEEE Standards Committee or Standards Development Working Group agreed to oversee this activity? Yes

If yes, indicate the IEEE committee's name and its chair's contact information.

IEEE Committee Name: Standards Committee 21 (SC21) Chair's Name: Mark Siira Chair's Email Address: mark.siira@ieee.org

Additional IEEE committee information, if any. Please indicate if you are including a letter of support from the IEEE Committee that will oversee this activity.

IEEE collects personal data on this form, which is made publicly available, to allow communication by materially interested parties and with Activity Oversight Committee and Activity officers who are responsible for IEEE work items.

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# IEEE SA STANDARDS ASSOCIATION

# 7.2 Activity Management

If no Activity Oversight Committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc.).

N/A

# 7.3 Procedures

Indicate what documented procedures will be used to guide the operations of this activity; either (a) modified baseline *Industry Connections Activity Policies and Procedures* (entity, individual), (b) *Abridged Industry Connections Activity Policies and Procedures* (entity, individual), (c) Standards Committee policies and procedures accepted by the IEEE SA Standards Board, or (d) Working Group policies and procedures accepted by the Working Group's Standards Committee. If option (a) is chosen, then ICCom review and approval of the P&P is required. If option (c) or (d) is chosen, then ICCom approval of the use of the P&P is required.

Specify the policies and procedures document to be used. Attach a copy of chosen policies and procedures.

(b)Abridged Industry Connections Activity Policies and Procedures (individual)

# 8. Participants

### **8.1 Stakeholder Communities**

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity and will be invited to participate.

- IEEE SA staff liaison(s)
- Liaisons from other IEEE committees and activities (such as G-PST & GEPS)
- Std 1547 series WG Chairs
- NARUC/NASEO liaisons
- FERC liaison
- PUC liaisons from specific states (e.g., CA, HI)
- NERC liaison
- Liaisons from interested ISOs/RTOs
- DOE liaison
- NIST liaison
- Industry liaisons (e.g., SEIA, IREC)
- UL liaison

### **8.2 Expected Number of Participants**

Indicate the approximate number of entities (if entity-based) or individuals (if individual-based) expected to be actively involved in this activity.

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#### 25-50 individuals

#### **8.3 Initial Participants**

Provide a few of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

| Individual Name   | Employer      | Affiliation   |
|-------------------|---------------|---------------|
| David Narang      | NREL          | NREL/DOE      |
| Jens C. Boemer    | EPRI          | EPRI/NREL/DOE |
| Mark Siira        |               |               |
| Wayne Stec        | Distregen LLC | Distregen LLC |
| Charlie Vartanian | PNNL          | PNNL/DOE      |

#### **8.4 Activity Supporter/Partner**

Indicate whether an IEEE committee (including IEEE Societies and Technical Councils), other than the Oversight Committee, has agreed to participate or support this activity. Support may include, but is not limited to, financial support, marketing support and other ways to help the Activity complete its deliverables.

Has an IEEE Committee, other than the Oversight Committee, agreed to support this activity? No\*

\* Joint sponsors of P1547.x projects have been invited.

If yes, indicate the IEEE committee's name and its chair's contact information.

IEEE Committee Name: Committee Name Chair's Name: Full Name Chair's Email Address: who@where

Please indicate if you are including a letter of support from the IEEE Committee.

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