

Interconnection Standards -- IEEE SCC21 P1547 Series

Prepared For
Fuel Cell Standards Update

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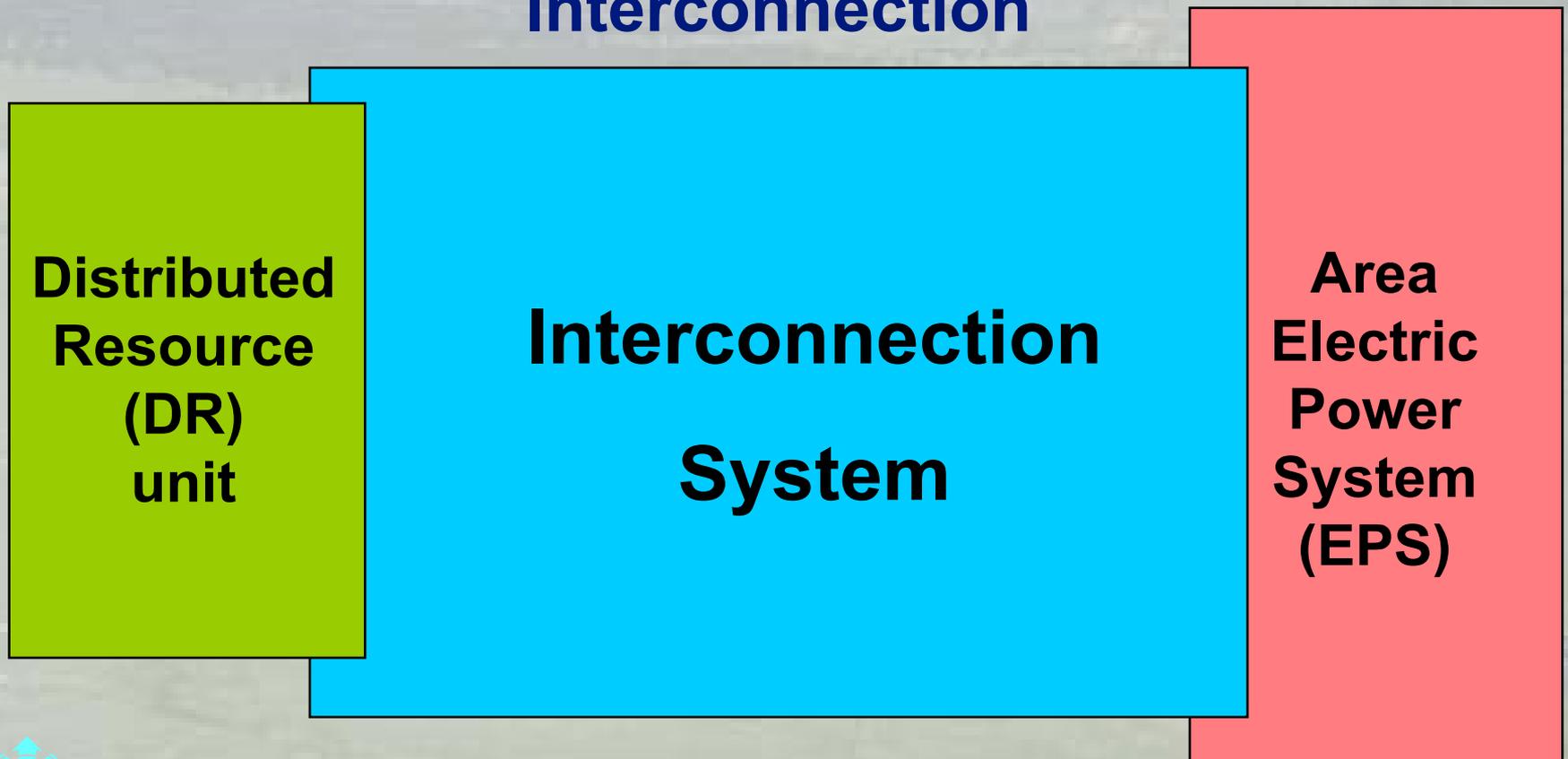


IEEE Interconnection Standards

- Being developed by IEEE Standards Coordinating Committee 21 (IEEE SCC21)
- SCC 21 responsible for standards development in areas of
 - Fuel cells
 - Photovoltaics
 - Dispersed generation
 - Energy storage
- 400 SCC21 work group members (all work groups)
- SCC21 developing P1547 Series of Interconnection Standards -- P1547 Affirmed by IEEE P1547 Ballot Group

Interconnection Is The Focus

P1547: Technical Specifications for Interconnection



Interconnection is the Focus

P1547 IS:

- **A Technical Standard –**
- **Functional Requirements For**
 - the interconnection itself
 - the interconnection test
- **Technology neutral,** e.g., does not specify any particular equipment nor equipment type
- **A single (whole) document of** mandatory, uniform, universal, requirements

P1547 Is NOT:

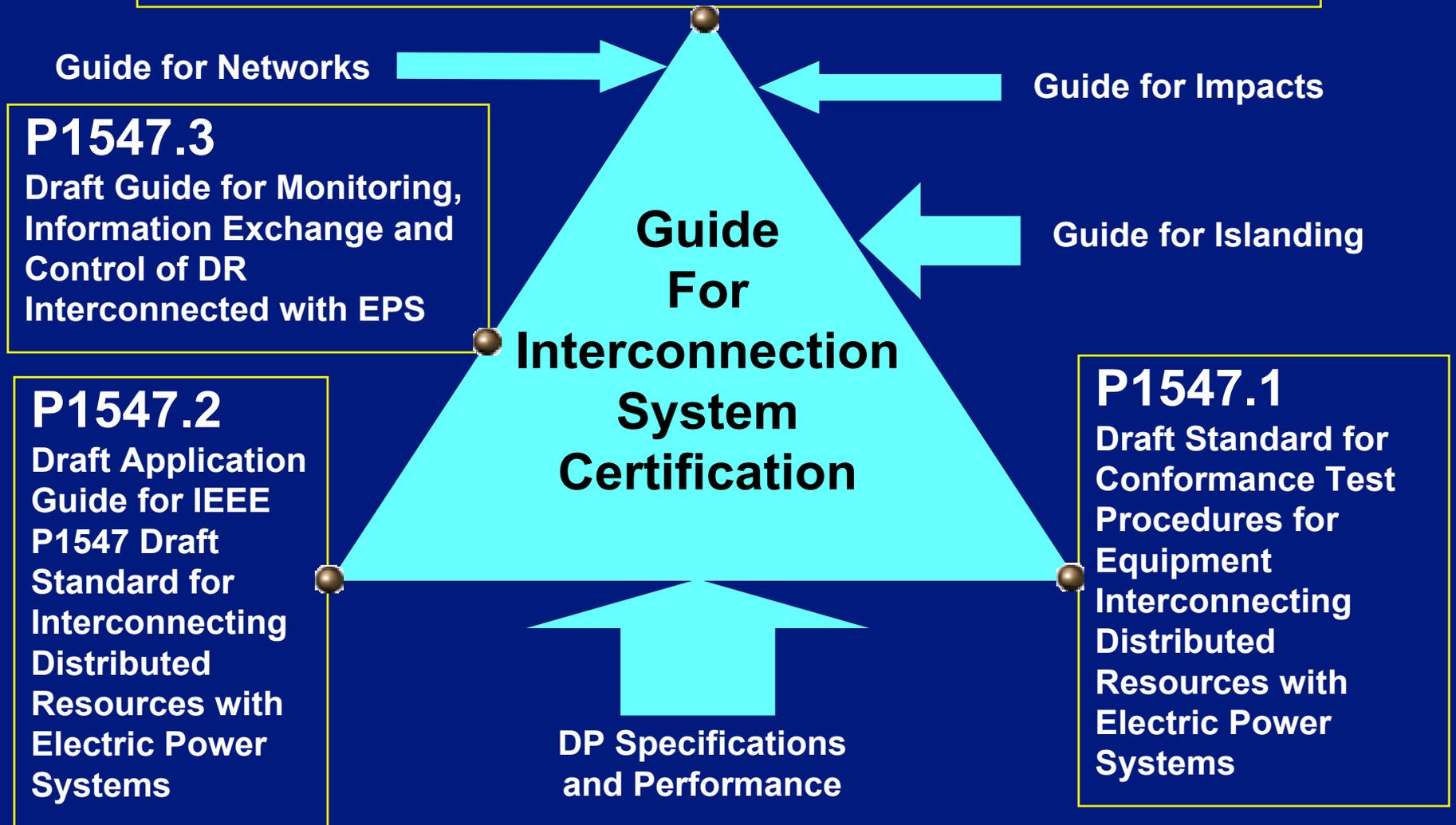
- a design handbook
- an application guide
- an interconnection agreement
- prescriptive, e.g., does not address DR self-protection, nor planning, designing, operating, or maintaining the Area EPS.

IEEE P1547 Series of Standards

- **P1547: Interconnection Criteria and Requirements**
- **P1547.1: Conformance Test Procedures**
- **P1547.2: Application Guide to P1547**
- **P1547.3: Monitoring, Information Exchange, and Control**

P1547 Series of Standards for Interconnection

P1547 Draft Standard for Interconnecting Distributed Resources with Electric Power Systems



The above identifies existing standards development projects (P1547 series) and activities under discussion by IEEE SCC21 Work Group members.

IEEE P1547 Standard Status

- Affirmative IEEE Ballot -- February 2003
 - Voting Membership
 - 230 members (31% general interest, 4% government, 30% producer, 35% user)
 - 91% affirmatives
- Publication Target: summer 2003

Closing Remarks

➤ **P1547 IEEE Publication** -- Summer 2003 Target Date.

➤ **P1547 Series of Standards Development**

➤ gains sustainable support as state and federal activities heat up.
Need for technical standards becoming more evident as part of industry acceptable interconnection agreements.

➤ **DOE and NREL support** plays an essential role and provides resources for facilitating and leading IEEE SCC21 P1547 industry driven efforts.

➤ **Industry driven partnerships a success --**

➤ on average 100 members participated in each P1547 meeting;
➤ estimated cost shared by all stakeholders is \$4.5M.



Next Meeting: P1547 Series Work Groups

- **June 4 – 5, 2003 in Denver Colorado**
- **Concurrent Meetings:**
 - **P1547.1: Conformance Test Procedures Standard**
 - **P1547.2: Application Guide to P1547**
 - **P1547.3: Guide for Monitoring, Information Exchange, and Control**

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- **IEEE SCC21 Standards Coordinating Committee 21** on Fuel Cells, Photovoltaics, Dispersed Generation, & Energy Storage
<http://grouper.ieee.org/groups/scc21/>
- **P1547 Series of Standards for Interconnection**
<http://grouper.ieee.org/groups/scc21/1547>
- **DOE** <http://www.eren.doe.gov/distributedpower/>

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