



## Rule 21 Working Group Workshop

April 29, 2011  
California Public Utilities Commission  
**Auditorium**

### Offsite Attendees:

Phone-in: 1-866-812-8481

Participant code: 4545236

The phone line will be listen-only. Phone participants can e-mail questions or comments during the workshop to Kace Fujiwara, at [kf1@cpuc.ca.gov](mailto:kf1@cpuc.ca.gov). There will be no webex participation at this workshop.

This agenda and all workshop materials will be posted on the CPUC's Rule 21 website as of April 28, 2011: <http://www.cpuc.ca.gov/PUC/energy/DistGen/rule21.htm>. Participants will need to download the presentation materials separately.

---

### Overview:

The CPUC's Rule 21 is the interconnection tariff that applies to distributed generation (DG) interconnecting under the CPUC's jurisdiction. It was first developed in the 1980s, and, since being revised in 2000, it has been primarily utilized by generating facilities interconnected to serve onsite customer load. California utilities have interconnected more than 83,000 distributed generating facilities using Rule 21, the vast majority serving customer load.

Rule 21 was originally used to interconnect PURPA Qualifying Facilities (QFs), which included both renewable and combined heat and power (CHP) generators designed to serve both some onsite load as well as export to the utility system. At that time, Rule 21 had no simplified interconnection study process, and was used to study each project individually. While the QF program has been nearly dormant to new facilities for over two decades, the recent CPUC-approved QF settlement opens the path to new QF development, and it is likely that these QFs will interconnect under Rule 21.

In the early 2000s, the CPUC undertook a Rule 21 reform process that greatly facilitated the interconnection of small (under 1 MW) self-generation units. The reforms created the "Simplified Interconnection" process that exempts small self-generation from certain studies and fees, due to the minimal impact these systems have on the grid.

Today, Renewable Portfolio Standard (RPS)-eligible generation solicitations through various RPS procurement mechanisms, including the renewables feed-in tariffs and the Renewable

Auction Mechanism (RAM), are starting to facilitate the development of generators with continuous export to serve system load. While most RPS projects appear to be using the utility Wholesale Distribution Access Tariffs (WDAT), approved by the Federal Energy Regulatory Commission (FERC) for interconnecting wholesale generators, some of these projects may utilize Rule 21.

The evolving nature of the systems that currently use and are planning to use Rule 21 to interconnect have focused marketplace and regulatory interest on the need for sound interconnection policy, and particularly on the Rule 21 tariff. Utilities, generators, advocates, customers, and the CPUC have all identified various technical, processing, methodology, fairness, and transparency issues arising under Rule 21 in today's interconnection context. The point on which all stakeholders agree is that Rule 21's technical components and policy principles must remain robust to serve as California's key DG interconnection tariff.

This workshop aims to define the technical issues now arising under Rule 21 more concretely, and begin a discussion of the policy principles that it should reflect in today's DG context. The CPUC has three objectives for this workshop:

- 1) Identify and discuss the open and urgent technical issues of Rule 21 that are affecting the interconnection of DG resources serving customer and system load.
- 2) Brainstorm and discuss interconnection policy principles that must be instituted to maintain grid safety, grid reliability, achieve California's renewable energy goals, and best serve customers.
- 3) Discuss the Rule 21 Working Group's renewed role in addressing the most urgent interconnection issues.

## Detailed Agenda

### **I. Overview – CPUC Staff** **10:00 – 10:30 AM**

- Introductions
- Housekeeping
- Workshop goals
- Problem statement

### **II. Rule 21 Working Group Accomplishments, 2000-2008** **10:30-10:45 AM**

- Accomplishments and key items learned to carry forward

### **III. Technical Issues Under Rule 21** **10:45 AM-12:15 PM**

- A. Technical issues: Interconnecting facilities that serve customer load
- PG&E Case Study: Volume and complexity of Net Energy Metering interconnections
  - Rule 21's low-penetration technical screens: Too low? Asking the right questions for facilities serving customer load?
  - Volume of applications, electrical interdependence, and system impact: What trends and/or problems are emerging?
  - Rule 21 processing: Is the Initial Review / Supplemental Review / Detailed Study process still viable for customer-side facilities?
- B. Technical issues: Interconnecting facilities that export and/or serve system load
- SCE Case Study: The CREST Feed-in Tariff Program
  - Rule 21's review versus higher DG penetration levels and/or exporting facilities: What are the major technical issues?
  - Volume of applications, electrical interdependence, and system impact: What trends and/or problems are emerging?
  - Specific needs of facilities interconnected under Rule 21 and serving system load: Coordination with CAISO for Resource Adequacy credit? Other?

### **LUNCH**

**12:15 - 1:15 PM**

**IV. Rule 21, Statewide Interconnection Policy, and Customer Service 1:15 – 2:15 PM**

- Equitable cost sharing
- Potential coordination with CAISO queue and cluster study process
- Efficient application processing
- Defined study methodology
- Tariff language consistency
- Dispute resolution
- New equipment certification
- Data transparency
- Others

**V. The Rule 21 Working Group**

**2:15 – 2:45 PM**

- CPUC facilitation, stakeholder participation, technical and policy subcommittees
- Collaboration with Renewable Distributed Energy Collaborative (Re-DEC)

**VI. Wrap-up**

**2:45 – 3:00 PM**

- Summary, Next Steps