PG&E
Navigating the Rule 21 Process
Generation Interconnection Services

Presenters:
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Agenda

- Introduction
- Rule 21 Process
- Application Walkthrough
- Q&A
- Resources
Generation Interconnection

- Electric Rule 21 describes the process and requirements for safe and reliable interconnections of non-utility generators to PG&E’s electrical system

- Consistent in form and content to the SDG&E’s and SCE’s Rule 21
Electric Rule 21 Overview

- Describes the interconnection process
- Identifies customer’s responsibilities
- Defines “parallel” generation
- Provides that a single point of contact at the utility will act as Project Manager
- Defines process steps – project review
- Defines “simplified” interconnection
- Establishes a consistent study fee and review process
- Outlines pre-certification and certification testing requirements
Applicability

This Rule describes the Interconnection, operating and Metering requirements for Generating Facilities to be connected to Pacific Gas and Electric’s (PG&E) Distribution System over which the California Public Utilities Commission (Commission) has jurisdiction. Subject to the requirements of this Rule, PG&E will allow the interconnection of Generating Facilities with its Distribution System.
General Rules, Rights and Obligations

- Authorization Required to Operate
- Separate Agreements Required for Other Services
- Service Not Provided With Interconnection
- Compliance With Laws, Rules and Tariff Schedules
- Design Reviews and Inspections
- Right to Access
- Confidentiality of Information
- Prudent Operation and Maintenance Required
- Curtailment and Disconnection
1. APPLICATION
   • Receive application
   • Acknowledgement
   • Preliminary review
   • Receive missing info
     • Final review
   • Deem complete

4. CONSTRUCTION
   • Interconnection work
   • Approve pertinent documents
   • Receive notice of Generator’s readiness & relay test report
   • Pre-parallel Inspection

2. ENGINEERING
   • Initial review
   • Supplemental Review
   • Detailed interconnection study (DIS)

3. AGREEMENT
   • Provide agreements
   • Receive signed agreements
   • Process agreements/payment
Application and Interconnection Process

APPLICATION PROCESS

• Applicant Initiates Contact With PG&E
• Applicant Completes an Application
• PG&E Performs an Initial and Supplemental Review and Develops Preliminary Cost Estimates and Interconnection Requirements
• When Required, Applicant and PG&E Commit to Additional Interconnection Study Steps.
Application Processing

Start at our website:

Distributed Generation (Rule 21 Retail Generators)

## Application Processing

Which application to complete? [http://www.pge.com/tariffs](http://www.pge.com/tariffs)

<table>
<thead>
<tr>
<th>Program</th>
<th>Technology</th>
<th>Size Limit</th>
<th>Application Forms</th>
</tr>
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<tbody>
<tr>
<td>Standard NEM</td>
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Application Processing

Greenfield Project? (New service & new generation)

A New interconnection in conjunction with a new service

An Application for Service must be completed. Additional fees may be required if a service or line extension is required (in accordance with PG&E Electric Rules 15 and 16). Please contact PG&E at 1-800-PGE-5000.

Existing Generation?

List it ALL generation in Application Form 79-974.

Include existing and new generation in SLD.

In search of existing generation? For PG&E to share customer information, complete: Form 79-1095, Authorization to Receive Customer Information or Act Upon a Customer's Behalf
Application Processing

WE DO NOT REQUIRE Four (4) copies of Application, only one hard copy - Electronic submittals are preferred (gen@pge.com)

1. A Single-line drawing (SLD). Include Manufacturer & Model Number of A/C disconnect on the SLD

2. Site plans and diagrams, electric output meter(s) and the A/C disconnect switch. Provide Specs of Net Generation Output Meter (NGOM) panel (if required).

3. If transformers are used provide transformer nameplate information (voltages, capacity, winding arrangements, connections, impedance, etc.)

4. If a transfer switch or scheme is used to interconnect the Generating Facility with PG&E Distribution System, provide component descriptions, capacity ratings, and a technical description of how the transfer scheme is intended to operate

5. If protective relays are used to control the interconnection, provide protection diagrams or elementary drawings showing relay wiring and connections, proposed relay settings, and a description of how the protection scheme is intended to function

6. Application study fee may be required
Interconnection Process

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Review Process

- **Application Review**: reviewed for completeness within 10 business days of receipt.

- **Initial Review**: within 10 business days of deeming the application complete.

- **Supplemental Review**: The review, if required, should be completed within 20 business days of deeming the application complete.

- **Detailed Interconnection Study**: The applicant must enter into an agreement with Pacific Gas and Electric Company to perform such additional studies, facility design/engineering and to provide detailed cost estimates for fixed price or actual cost billing should interconnection upgrades be required. The study may be at the applicant's expense.
## Agreements

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Facility Completion
Metering, Monitoring and Telemetry

1. General Requirements
2. Metering by Non-PG&E parties
3. Net Generation Output Metering (NGOM)
4. Point of Common Coupling (PCC) Metering
5. Telemetering
6. Location
7. Costs of Metering
8. Multiple Tariff Metering
Pre-Parallel Inspection (PPI)

**Certified Equipment**
Customer to provide FINAL Building Permit
PG&E to schedule inspection

**Uncertified Equipment**
Customer to provide in addition to above:
All items in Pre-Parallel Checklist
Basic Information Sheet
Battery Test Reports

Once Inspection is a **PASS** PG&E Issues PTO Letter
Key Messages

Apply early!

Completed application:

- Single line – new and existing generation (if applicable)
- Main disconnect detail
- All fields completed
- If existing generation, must be included in application

Electronic applications preferred – gen@pge.com

Application fees – do not send us a check.

“Customer Release Form”

Communicate, communicate, communicate

CSI application does not initiate interconnection process
Other Topics

SB 489

NEMV

New Rule 21 (DG OIR)
Who to contact/resources

CSI

Tariffs

GIS
  – Gen@pge.com
  – 1-800-weconnectyou

www.pge.com/gen
Resources

NEM Webpage

NEM Schedule

Distributed Generation Webpage

Contact gen@pge.com for interconnection related questions
Thank You

Presenter
email@pge.com