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New PURPA QF Interconnections

PG&E Proposal – Stakeholder Meeting
March 15, 2011

Redacted





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Definitions

CPUC – California Public Utilities Commission

FERC – Federal Energy Regulatory Commission

CAISO – California Independent System Operator

QF – Qualifying Facility as defined by PURPA

PURPA – Public Utility Regulatory Policies Act of 1978

Rule 21 – CPUC approved Rule that governs CPUC jurisdictional generator interconnections

WDT – Wholesale Distribution Tariff (amendment filed March 2 requesting approval from FERC)

GIP – Generator Interconnection Procedures (FERC)

PPA – Power Purchase Agreements

NEM – Net Energy Metering



Summary of Proposal

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Pacific Gas and Electric Company (PG&E) is proposing that the California Public Utilities Commission (CPUC or Commission) exercise its jurisdiction and authorize PG&E to use current federal jurisdictional interconnection rules and procedures to fulfill Qualifying Facility (QFs) requests for interconnection on an interim basis.

PG&E proposes that this interim procedure would be in effect while a working group of generation interconnection stakeholders determines how PG&E's CPUC Tariff Rule 21 can best be conformed to the demands of today's interconnection frame work.

The purpose of this document is to lay out PG&E's high-level objectives and to discuss the underlying principles behind this interim QF interconnection proposal with interested stakeholders.

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Applicability of Proposal

This proposal and related documents apply only to QF generating facilities 20MW or less whose electric exports to the grid, are entirely sold to PG&E, their serving utility, under a PURPA power purchase agreement.

The interconnection of these QFs are under the CPUC's jurisdiction.



Objectives of Proposal **DRAFT**

- CPUC-approved interconnection procedure for QFs
- Uniform procedure for all sizes of exporting wholesale generators until an appropriate final Rule 21 interconnection procedure is established for new PURPA QFs
- Ensure fair, equitable, and consistent treatment of all interconnection requests regardless of jurisdiction or PPA
- Allow QFs to benefit from FERC treatment of network upgrades
- Allow QFs to qualify for Resource Adequacy

Out of Scope

- PG&E is not questioning CPUC's jurisdiction over the interconnection of these QFs
- This proposal would not apply to NEM customers making sales under AB 920

Schedule

We are here 

Issuance of QF Interconnection Proposal Document to stakeholders	March 3
In-person stakeholder meeting in San Ramon to discuss QF Interconnection Proposal document, draft Advice Letter, and stakeholder concerns	March 15
Stakeholder Comments due on QF Interconnection Proposal document and draft Advice Letter	March 31
Submit Advice Letter to the California Public Utilities Commission	Target - April 15

Power Purchase Agreements **DRAFT**

- Upcoming PURPA PPAs:
 - Qualifying Facility and Combined Heat and Power Settlement (QF/CHP Settlement) approved in CPUC Decision (D.) 10-12-035 and
 - AB 1613 Program^[1]: Standard Contracts and Tariffs for Purchase of Excess Electricity from Eligible Small Combined Heat and Power Facilities
- Transactions not covered:
 - NEM and AB920

[1] Advice 3696-E-A, Establishment of Standard Contracts and Tariffs for Purchase of Excess Electricity from Eligible Small Combined Heat and Power Facilities was submitted to the Commission on January 31, 2011.

History of QF Interconnections **DRAFT**

- PG&E last entered into new PURPA QF interconnection agreement under Rule 21 over 15 years ago.
 - When PURPA QFs last interconnected in the 1990's, a more generic Rule 21 was in effect that fit the PURPA QF PPAs.
- Since the early 1990's there have been a number of important changes in the requirements for generating facility interconnection and grid management.
 - FERC required the CAISO and IOUs to establish standard interconnection procedures at both distribution and transmission levels.
 - Rule 21 has been updated to address the market need of small generating facilities participating in retail net-energy metering or non-export behind the meter generating facilities.

Rule 21's current state

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- As a result of efforts of the Energy Commission, the CPUC, California's IOUs, municipal public utilities, engineering companies, manufacturers, distributed generation developers, and clean energy advocates Rule 21 was changed significantly several years ago to accommodate net metered and non-exporting facilities.
- Currently there is no CPUC-approved interconnection agreement for use with new PURPA QFs.
- Rule 21 does not adequately address the advent of the CAISO.



Rule 21 and WDT Historical Applicability

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- Rule 21 is used mostly for net metering projects
 - Residential: under 30kW, average 6kW (20,000 interconnections in 2009 and 2010)
 - Commercial: over 30kW, average 247kW (400 interconnections in 2009 and 2010)
 - Rule 21 Non-Export: Residential and Commercial, average 500 kW (100 interconnections in 2009 and 2010)
 - Even with these small sizes upgrades may be required which adds time to the interconnection process. Such timelines are comparable to the WDT timelines.
- WDT is meant for projects between 500kW and 20,000kW (few projects are larger or smaller)
 - 244 projects in the WDT Queue with an average generating size of 9.4MW



Rule 21 Structure

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- Structure does not accommodate “Greenfields” as effectively as WDT process because it assumes generator is firmly committed to development at the time of application.
- Rule 21’s application process requires electric service to be established along with account with PG&E prior to application.
- Rule 21 assigns existing PG&E capacity on a “first-come, first-served” basis.
- Rule 21’s scope of study focuses on protection from the generator.
- Less than 5 percent of Rule 21 projects currently require upgrades due to smaller average size of generating facilities.
- Additional study will be required for upgrades when needed.



WDT Structure

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- Structure accommodates “Greenfields” and provides information for the customer to make business decisions throughout the procedure.
- WDT’s application process does not require electric service to be established prior to application.
- WDT’s scope of study includes upgrades to PG&E’s system and protection from the generator. (Focus heavily on upgrades)
- WDT has three different study tracks. (Fast Track, ISP, and Cluster)
- Greater than 95 percent of WDT projects require upgrades due to average size of generating facility.

Interconnection Process Comparison **DRAFT**

	Rule 21	GIP
Queue	None posted	Public Queue
Security Postings	Silent	Detailed
Network Upgrade Repayment	No such provision	Detailed
Coordination of group of projects	Silent	Detailed
Cost Allocation between Generators	Silent	Detailed
Resource Adequacy	Silent	Detailed
Provides “first looks”	Silent	Detailed

Rule 21 study structure is serial in nature. The status quo is likely to result in the same challenges that existed under the previous SGIP serial process such as:

- “Queue hogging” by untenable projects
- Study accuracy being negated by addition and withdrawal of impacted projects
- Potentially harsh application of cost causation principle

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Benefits of the Proposed Solution

- To allow interconnections to begin immediately upon the effective date of new QF programs, without waiting for a new Rule 21.
- FERC Generator Interconnection Procedures are effective, well-established, and well-understood by all parties.
 - Allows new resources to qualify for resource adequacy through full capacity interconnection requests.
 - Under FERC policy, network transmission upgrades are refunded, unlike the treatment under Rule 21.
- Interim use of FERC processes would allow the CPUC time to investigate the best interconnection procedures, such as through an updated Rule 21, continued use of the FERC processes, or a hybrid approach.
- PG&E further suggests that the CPUC reinstate the Rule 21 working group forum in the context of Rulemaking (R.)10-04-005 to support the discussion of how best to accommodate QF interconnections.



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Q & A



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Wrap up and Next Steps

- Submit comments via email to PG&E by March 31, 2010.
- The email address is gen@PGE.com. Please note in the subject line “QF Comments”
- Questions regarding this stakeholder process should be addressed to William Chung (415-973-1350) or Harold Hirsch (415-973-1305)

Resources and information can be found on PG&E’s Wholesale Generator Interconnections webpage:

<http://www.pge.com/b2b/newgenerator/wholesalegeneratorinterconnection/index.shtml>



Appendix: Interconnection Study Process¹⁸ Fee Comparison

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	Rule 21	GIP Fast Track	GIP Independent	GIP Cluster
Application Fee for CHP	\$800	\$1000 \$1500 CAISO	\$50k plus \$1k/MW (max \$250k)	\$50k plus \$1k/MW (max \$250k)
Initial Review	Included	Included	n/a	n/a
Supplemental Review	\$600	Estimate	n/a	n/a
Detailed Interconnection Study	Estimate	n/a	n/a	n/a
System Impact Study	Not specified	n/a	Included	n/a
Facilities Study	“	n/a	Included	n/a
Phase I	“	n/a	n/a	Included
Phase II	“	n/a	n/a	Included



Appendix: Interconnection Study Process¹⁹ Time Comparison

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	Rule 21	GIP Fast Track	GIP Independent	GIP Cluster
Initial Review	10 BD	10 BD 15 BD CAISO	n/a	n/a
Supplemental Review	20 BD	20 BD 10 BD CAISO	n/a	n/a
Detailed Interconnection Study	Estimate	n/a	n/a	n/a
System Impact Study	Not specified	n/a	60 BD 90 BD CAISO	n/a
Facilities Study	“	n/a	60 BD 90 BD CAISO	n/a
Phase I	“	n/a	n/a	134 CD
Phase II	“	n/a	n/a	196 CD



Appendix: Interconnection Study Process²⁰ Time Comparison, Cont.

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	Rule 21	GIP Fast Track	GIP Independent	GIP Cluster
	Typically due to non-certified nature of CHP, QFs will likely require a Detailed Study	Typically due to non-certified nature of CHP, QFs will likely fail the screens.	If qualified for ISP.	Default
Application to Interconnection Agreement timeline for PURPA QFs estimate	90 BD to 180 BD Additional study will be required for any needed upgrades.	n/a	Between 200 BD to 260 BD (Depends on Customer Response times)	Between 460 BD to 540 BD (Depends on Customer Response times)