

Decision 05-08-013 August 25, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding Policies,
Procedures and Incentives for Distributed
Generation and Distributed Energy Resources.

Rulemaking 04-03-017
(Filed March 16, 2004)

**INTERIM OPINION ADOPTING CHANGES
IN INTERCONNECTION RULES FOR DISTRIBUTED GENERATION**

This decision adopts changes to rules governing interconnections between distribution systems of electric utilities and distributed generation (DG) facilities, which are power generators owned and operated by customers and which may provide power to the utility. Our order instituting this rulemaking stated our intent to consider such issues as they relate to metering requirements, interconnection fees and costs, and resolution of disputes between DG developers and utilities, among other things. We raised these issues hoping to simplify tariff rules, promote a fair allocation of cost responsibility and promote the development of cost-effective DG projects generally. Many of the tariff changes we order today have recently been adopted formally in a report issued by the California Energy Commission (CEC).

I. Background

The Commission opened this proceeding to refine its existing programs and policies for promoting the development of DG in California. As part of that effort, the CEC took the initiative to work with the utilities and DG community to update utility tariff rules for DG interconnections to the utilities' distribution systems. The culmination of this work was a staff report, approved by the CEC

on February 2, 2005, titled “Recommended Change to Interconnection Rules.” The CEC issued the report following a public process involving meetings with the Rule 21 Working Group.¹ The goal of the meetings and the report has been to determine whether and how utility interconnection rules for DG should be changed to promote safer and more cost-effective deployment of DG in California.

On February 16, 2005, the CEC served a Notice of Availability of the report on all parties to this proceeding and filed the report with this Commission for its consideration. The report recommends the Commission order the electric utilities to conform their tariffs to the recommendations in the CEC report and by implication recognizes the Commission’s jurisdiction to effect those tariff changes. The CEC report “Recommended Changes to Interconnection Rules” is attached.

A ruling issued in this proceeding on March 1, 2005 solicited comments as to whether the Commission should adopt the CEC’s recommendations for changes to utility interconnection rules for DGs and related ratemaking. Parties that filed comments on March 14, 2005 are San Diego Gas & Electric Company (SDG&E), Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), the City of San Diego, Energy Producers and Users Coalition (EPUC) Cogeneration Association of California (CAC(and Americans for Solar Power (ASPV).

¹ The Rule 21 Working Group is comprised of utility personnel, manufacturers of DG facilities, DG developers, DG customers, and regulators. The Commission created the Working Group to develop and refine the utilities’ Rule 21 interconnection tariff rules.

II. Summary of Decision

The utility tariffs that are the subject of this portion of our inquiry are those referred to as Rule 21. PG&E's Rule 21 provides that its purpose is to govern "the Interconnection, operating and Metering requirements for Generating Facilities to be connected to PG&E's 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." Rule 21 for SDG&E and SCE state similar objectives.

We herein adopt the CEC's recommendations on several technical matters relating to interconnection rules, especially in light of the extensive public process the CEC conducted in the development of the report, as described in the report. We do not adopt any cost allocations or revenue requirement changes here, although we direct the utilities to address certain cost and allocation issues in appropriate ratemaking proceedings.² We also incorporate the CEC's recommendations regarding the resolution of disputes between utilities and DG interconnection applicants regarding interconnection matters.

We adopt the following changes to the utilities' interconnection rules and our policies:

- We retain existing rules and tariffs which address the circumstances under which DGs receiving publicly-funded incentives or tariff exemptions must install Net Generation Output Metering (NGOM) equipment, clarifying that this equipment is unwarranted when less intrusive methods or

² Although the CEC explored ratemaking issues, the record in this proceeding is not sufficient to authorize the utilities to increase their revenues or to decide how those revenues should be allocated to various rates.

cost-effective means of providing data are available, consistent with Section F.3 of Rule 21;

- We clarify that billing-grade or utility-owned meters are not necessary where the meter conforms to technical specifications outlined in utility tariffs, Rule 22;
- The utilities and DG interconnection applicants are required to submit to mediation of disputes regarding interconnections.
- The utilities must provide detailed justification to parties disputing the imposition of technical or operational requirements;
- The CEC or a designated utility will maintain a public data base describing utility interconnection disputes and their resolution in cases where the customer provides the information or agrees that the utility may provide it. We also direct the Rule 21 Working Group to develop the procedure for providing the information and the types of information that should be included at the website;
- The utilities shall track interconnection costs by tariff (over / under 10 kW and technology of Net Energy Metered (NEM), non-NEM), review level, inspection and distribution system modification cost categories to inform future decisions allocating costs associated with interconnection processing;
- Subject to certain conditions, a utility may not restrict export from a NEM DG while a non-NEM DG on the same meter / account is supplying the customer's load from a facility that applies more than one technology using more than one tariff;
- Interconnection application review fees and the costs associated with distribution system modifications for non-NEM projects will continue to be the responsibility of the DG owner;
- The Rule 21 Working Group will develop network interconnection rules that can be incorporated into Rule 21 and report on the progress of this effort to the Integrated Energy Policy Report (IEPR) Committee by March 2006, and will file the report in this docket.

As the CEC recommends, we do not adopt any changes to the interconnection application review fee structure at this time. We do, however, state our intent to change the fees so that they recover some portion of costs following review in each utility's next general rate case.

III. Net Generation Output Metering (NGOM)

The CEC's report assesses whether and under what circumstances utility tariffs should require a DG facility to install NGOM. NGOM permits the utilities to monitor the energy output of a DG facility. Currently, NGOM is required by the utilities' Rule 21 for certain purposes and in cases where "less intrusive and / or more cost-effective options for providing the necessary DG Facility output data are not available." NGOM is required currently for those DG facilities receiving incentives under the Self-Generation Incentive Program (SGIP) for project evaluations, those cogenerators receiving special gas rates to determine the amount of gas qualifying for the discounts, and facilities receiving standby charge exemptions to evaluate operating efficiencies.

The utilities have advocated for NGOM at all new DG facilities and assert that those meters should be "revenue quality," whether owned by the utility or the customer. From the utilities' perspective, the purpose of the NGOM would be to provide accurate information for billing a DG customer for certain charges that are normally assessed on the basis of demand or departed load, such as standby charges, cost recovery surcharges or other nonbypassable charges. PG&E observes that meters may be required in the future for assessing renewable production (green energy tags or renewable portfolio standard compliance). DG parties generally believe NGOM should only be required when the customer receives publicly-funded incentives or tariff exemptions.

The CEC agrees that NGOM is required when the customer receives publicly-funded incentive payments and / or specific tariff exemptions, other than

NEM customers. Otherwise, the CEC does not believe that NGOM is required. The current Rule 21 explicitly states that utilities shall only require NGOM to administer a tariff “to the extent that less intrusive and / or more cost effective options for providing the necessary Generating Facility output data are not available.” The CEC endorses the Commission’s existing policy³ of permitting estimated load for purposes of calculating the Cost Responsibility Surcharge (CRS).⁴ While the CEC shares the utilities’ concern that the estimated billing data may not be as accurate as metered data, and could result in customer billing disputes, the CEC believes a customer’s right to confidentiality is more important in this case. If the frequency of billing disputes increases substantially, the CEC states it will revisit this issue. We presume that the CEC will work with Commission staff to monitor the number and nature of the DG complaints we receive. The CEC also advises that in situations where NGOM is required, utility-grade meters are not needed as long as installed meters are acceptable and conform to the requirements set forth in Rule 22.

The CEC recommends the Rule 21 Working Group develop tariffs to implement these recommendations. The utilities would then submit tariff changes by advice letters.

The utilities reply to the CEC’s recommendation by questioning whether privacy is a significant issue in this context, especially since the metered information is used for billing as it is for any customer. PG&E argues that large

³ Adopted in Energy Resolution E-3831.

⁴ The CRS is a nonbypassable surcharge that recovers investments by the California Department of Water Resources and the utilities for energy costs that exceed market prices

DG facilities should be required to have meters in order to assure system reliability and consistency with Independent System Operator (ISO) tariffs.

We adopt the recommendations of the CEC with regard to NGOM and herein direct the utilities to submit tariff modifications following consultation with the Rule 21 Working Group. We note that metering requirements for projects receiving subsidies and incentive payments are governed by Section F of Rule 21. Our decision today does not affect current SGIP rules. Likewise, the requirement for NGOM metering to receive gas discounts is governed by gas tariffs rather than Rule 21 and is not affected by our decision today. The provision that exempts a DG from installing a NGOM meter “when less intrusive methods or cost-effective means of providing data are available” is already included in Rule 21. We clarify, as PG&E requests, that any DG under the DL-CRS tariff may install a meter if it objects to estimated metering information. We also presume that the rules we develop here do not preempt those in ISO tariffs or otherwise adopted by the Federal Energy Regulatory Commission (FERC) for projects that might affect system reliability. At this point, the matter does not appear to involve the ISO since the utilities schedule DG power. We recognize, however, the utilities’ responsibility to manage load and deliveries to the ISO can be complicated in cases where energy resources are not metered. We may address this issue at a future date if lack of metering creates reliability problems for the utilities.

We address in a subsequent section whether meters are required for combined technology DGs.

IV. Dispute Resolution Procedures

Utility tariffs currently provide that disputes with regard to interconnections be negotiated between the DG and the utility and then become subject to the Commission’s “consumer complaint” process. Tecogen, Inc. comments that in its experience, this process is slow, frustrating and uncertain.

The members of the Rule 21 Working Group recommended a process for mediating disputes. Generally, upon notice of a dispute regarding the application of Rule 21, each party would designate a representative with authority to make decisions and one with technical expertise. If parties cannot resolve their dispute within 45 days, they would either (1) continue negotiations or (2) make a written request to the Energy Division for mediation within 45 days. If the dispute is not resolved within 90 days from the date of the notice, either party could file a formal complaint with the Commission.

Members of the Working Group disagreed on three issues:

1. Whether the utility should be required to provide a technical explanation for its decision on an interconnection issue. PG&E believes it should only have to invoke system safety and reliability concerns.
2. Whether the resolution of the dispute should constitute precedent for future disputes with similar facts. PG&E doesn't believe this requirement is realistic because other projects will have distinguishable facts.
3. Whether the outcomes of the disputes should be made publicly available. PG&E argues that it does not release customer information without the permission of the customer and that the recommendation is contrary to the Commission's Rule 51, which requires confidentiality with regard to settlement negotiations.

The CEC generally supports the Working Group's recommendations. It suggests the parties to the dispute be provided five business days to notify each other of representatives for resolving the dispute. We agree with the CEC's recommendation and will adopt it.

The CEC defers to the Commission on where it will find mediators for an informal resolution process, whether in the Energy Division or elsewhere. We agree with the CEC that the tariffs should not identify any particular organization at the Commission since the Commission's management of its staff

resources must change from time to time. We will direct the tariffs to require that the parties either request an informal mediation from the Commission's Chief ALJ or by mutual consent, an outside third-party mediator.

The CEC agrees that the utility should be required to provide a technical justification for decisions that affect project interconnections. We share the CEC's concern that without such a requirement, the DG community cannot make sound business judgments, for example, in determining how to cure a problem. Moreover, the information is critical in any dispute resolution process and in order for the utility to avoid arbitrary decisions about DG interconnections. We will direct the utilities to provide, at the request of the DG interconnection applicant, written justification for any interconnection requirement, which shall provide relevant detail about how the interconnection may compromise the utility system or public safety, or compromise regulatory requirements. As SCE suggests, the utility's concern may relate to regulatory issues and the tariff language should recognize this may be the subject of the utility's interconnection requirements.

The CEC expresses concern about public disclosure of information relating to dispute resolution. While a dispute resolution process involving mediation will of necessity require the exchange and protection of confidential information during mediation, the outcome of the dispute resolution process, i.e., the agreement reached, must be public to the extent it does not disclose legitimately confidential information, such as trade secrets. Public disclosure of the technical aspects of the parties' resolution could be valuable to other interconnection applicants and ultimately to the utilities as future interconnection processes are informed by some previous ones. We will ask the CEC, or a designated utility, to maintain such information on its website. The information should be published where it is provided by the interconnection applicant or where the applicant

agrees that the utility may disclose it, and where it does not disclose technical or customer-related information the utility or the customer designates as confidential. We encourage the Working Group to refine this procedure and the types of information that should be included at the website, as the CEC suggests.

We believe that public disclosure of the resolution of a dispute, combined with written justifications for a utility's interconnection requirements and a mediation procedure, will promote consistent utility decision-making with regard to interconnection requirements. Accordingly, we do not have to address the proposal that the utilities consider as precedent the resolution of a dispute.

We will direct the utilities to submit tariff changes consistent with the foregoing and following consultation with the Working Group.

V. Interconnection Application Review Fees

Since 2000, Rule 21 of the utilities' tariffs has included fees for the review of applications to connect to the utilities' distribution system. The initial fee is \$800, with a supplemental \$600 for applications that require more than a screening. CEC believes these fees are substantially less than the utility's actual costs of processing the interconnection application. PG&E has been tracking costs for several years and estimates that, for some types of applications, it incurs an average of almost \$29,000 for processing (including applications that are ultimately not completed).

The Working Group does not recommend changing the fees at this time but suggests the utilities track costs, as PG&E now does, for possible fee changes at a later date. The CEC concurs with this recommendation, believing that the fees are not intended to recover costs but are instead meant to discourage speculative projects.

The Commission has expressed strong support for DG project development in California and has designed its programs to promote that

development. We have, however, expressed our concerns about the extent to which existing DG projects are cost-effective, given the incentives they receive and the costs they impose on ratepayers. The cost of processing an application and conducting needed facility inspections contributes to these costs and appears to be significant if PG&E tracking information is a reasonable indication. As the Working Group recognizes, the Commission recently held hearings in this proceeding to develop a method for assessing the costs and benefits of DG facilities and the program as a whole. We do not need to adopt such a methodology, however, to investigate the cost of application review and distribution system modifications that reflect utility costs.

In our role to oversee utility costs and revenues, we wonder whether the purpose of application review fees should be only to discourage speculative projects or whether in fact DG interconnection applicants should assume the full cost of the DG's interconnection. On the one hand, we wish to continue to encourage DG projects. On the other hand, subsidizing interconnection application review fees and distribution system modifications may encourage the development of projects that are not cost-effective. On balance, we believe DG interconnection applicants should ultimately assume at least some of the costs of interconnection reviews. If we find that additional incentives are required to promote development of cost-effective DG, we can provide additional subsidies or tailor the fees accordingly. We have no basis for increasing the fees associated with the initial and supplemental application reviews. For that reason and in deference to the CEC's recommendation, we retain the existing fees. We do, however, state our intent to bring them closer to cost based on utility proposals in subsequent general rate cases. In the meantime, we herein direct the utilities to track the costs of DG interconnection processing for 1) review in those rate cases and 2) the development of fees that are related to costs. In addition, we agree

with PG&E that the utilities should be able to charge for extraordinary inspection trips where the trips are required as a result of customer delay. Each may propose specific fees for these inspections in their advice letter filings.

VI. Metering for DG facilities with Combined Technologies and Subject to Different Tariffs

DG facilities using renewable technologies are provided the benefit of “net energy metering.” That is, they receive bill credits for energy they produce that is not simultaneously needed at the site and is fed into the utility distribution system. For solar and small wind NEM generators, the bill credit provides the DG a payment of the bundled rate for the utility’s purchase and delivery of the energy commodity.

Some DG facilities incorporate renewable and non-renewable technology, and therefore one or more tariffs may apply. For example, a DG facility may include a photovoltaic generator that qualifies for NEM and a fossil fuel generator that does not. Several questions have arisen about the rules and technical requirements for NEM at such “combined technology” sites. Existing tariffs and interconnection agreements do not address technical arrangements or certain administrative issues where multiple tariffs apply and multiple technologies are employed.

The CEC proposes two changes to policies in this regard. First, it would prohibit any tariff provision or methodology that restricts the export from the NEM generator while the non-NEM generator is supplying the customer’s load on the same meter and account. Second, it would shift all costs associated with utility distribution system modifications for combined technology DG facilities to utility ratepayers.

Except for the utilities, parties generally support a prohibition of tariff provision or methodology that restricts export from the NEM generator while the

non-NEM generator is operating. DG proponents state this would reduce the efficiency of the non-NEM generator and runs counter to the state's need for additional generation. The utilities, however, raise questions about whether such a policy would create unintended consequences, shift costs to other customers and create a variety of administrative complications that are unresolved by the CEC's report. SCE states that under the CEC's approach, a DG with a very small NEM generator and a much larger non-NEM fossil fueled generator will qualify as a combined technology DG facility and would receive the full range of NEM benefits –SCE states that CEC's assumption that such combined technology DG facilities provide commensurate ratepayer benefits is unrealistic. This generation "stacking" could encourage uneconomic dispatch because it could motivate the DG to serve as much of its load as possible with its fossil-fueled generator in order to export renewable energy for NEM credit. The utilities also object to the CEC's proposal to shift all utility distribution system modification costs for combined technology DG facility interconnections to utility ratepayers.

We concur with the CEC's general policy that protects the export for credit of NEM energy into the utility system. We also understand that the policy may create some complications that require additional attention, such as those identified by SCE in its comments to the report. We will adopt the CEC's recommendation with three protections proposed by SCE designed to assure the policy protects utility ratepayers while furthering the state's general goal of promoting renewable energy technologies. First, any energy reported by the NEM generator that exceeds the customer's annual energy usage from the utility will not be compensated, a requirement that is already in effect. Second, in no event will non-NEM generators receive credits and tariff exemptions designed for NEM generators. Third, and in order to assure that non-NEM generators do not receive NEM credits, any DG operating a combined technology DG facility

must install, at its cost, metering for the separation of energy measurements of NEM and non-NEM generators or relays that prevent export from the non-NEM generators at all times, unless an export agreement is executed.

We herein direct the Working Group to develop technical and administrative solutions to these and other implementation issues. In the interim, the utilities shall modify their tariffs to incorporate the policy and associated implementation rules in advice letter filings

With regard to the allocation of distribution system modification costs for combined technology DG facilities, we again consider our role to protect utility ratepayers from unreasonable rates and to allocate costs mainly to the customer causing them. D.02-03-057 exempted NEM generators from interconnection application fees, study costs and distribution system modification costs but did not do the same for non-NEM DG facilities, that is, those that do not use renewable fuel sources. We are not aware that the existing policy for non-NEM generators to pay for distribution system modification costs has unreasonably stifled DG development. As we stated earlier, if we ultimately find that cost-effective DGs are not being built, we will consider changes to the allocation of costs for the distribution system modifications. In the meantime, we believe that combined technology DG facilities should assume the full costs of distribution system modifications required for the interconnection of the non-NEM generators. If costs attributable to the non-NEM facility cannot be readily identified, the utility should calculate the non-NEM facility's cost liability according to the generator's share of annual expected energy of that generated by the combined technology DG facility.

The CEC report does not recommend how to allocate costs and payments for DG facilities that include two NEM generators operating under different

tariffs. We will direct the Working Group to propose ways to treat such facilities and address the matter in a subsequent decision.

VII. Interconnection Rules for Network Systems

The CEC report recognizes a need to develop rules for DG interconnections to distribution systems that have a network configuration. There are already a few major network systems in San Francisco, Oakland, and Sacramento. According to the CEC's report, the interconnections to these systems have been difficult, requiring the utilities to study each DG project and fashion their interconnection requirements individually due to lack of experience and guidelines.

The Working Group believes this is an issue that requires substantial attention in the near future. Its recommendations for pursuing this matter, which no party opposed, are as follows:

1. Develop definitions, characteristics, and design philosophies for different types of networks to provide a common basis of understanding
2. Identify network systems in California
 - Locations
 - Physical characteristics
3. Identify the stakeholders nationwide who may be able to provide information
 - Utilities with network systems
 - DG suppliers
 - Customers on network systems who may be interested in DG
 - Regulators
 - Network equipment providers and other experts

4. Identify and investigate other projects and sources of documentation
 - DUIT proposed network meeting and network-related testing
 - FOCUS-III project monitoring network-system DG sites
 - Massachusetts DG Collaborative
 - PG&E white paper and other technical literature
 - Institute of Electrical and Electronics Engineers (IEEE) Standard 1547.6 (SCC21 Chairman DeBlasio hopes to submit a Project Authorization Request to the IEEE board for this new activity in the first half of 2005)
 - Manufacturer data sheets / white papers
5. Identify and investigate the availability of other rules and requirements
6. Identify and investigate existing distributed energy resources on networks
7. Identify problems and solutions
 - Experience from utilities
 - Experience from system integrators
8. Investigate costs of protection schemes and protector rework

The CEC supports this process. We will direct the Working Group to pursue it and report its progress to the CEC and this Commission in a formal filing to be made no later than March 31, 2006.

Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Kim Malcolm is the assigned Administrative Law Judge (ALJ) in this proceeding.

Comments on Draft Decision

The draft decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed August 15, 2005 and reply comments were filed August 22, 2005. The final decision incorporates minor changes recommended in the comments intended to clarify the order's intent.

Findings of Fact

1. NGOM may be required for non-NEM generators for billing, assessing rates or special charges, or planning.
2. Some DG facilities do not require NGOM at this time in order for the utilities or DG to fulfill regulatory requirements or conduct operational activities.
3. NGOM may be required by the California ISO for certain large generating facilities in order to promote system reliability. Lack of metering on large DG may complicate the utilities' scheduling of power to the ISO.
4. DG interconnection applicants would benefit from the provision of information about the resolution of interconnection disputes. The provision of such information to a webmaster would not be unduly burdensome on utilities.
5. Public disclosure of some information regarding the resolution of disputes between a utility and a DG interconnection applicant might compromise the DG's privacy.
6. The parties concur that the existing process for resolving interconnection disputes between DG interconnection applicants and utilities has not been efficient.
7. Existing fees for interconnection processing do not appear to recover the costs of activities related to initial and supplemental application review; however, the record in this proceeding does not permit a final assessment of those costs.

8. Because the utilities currently do not charge for unnecessary inspection visits, there is little incentive by the DG to minimize those inspection visits.

9. Some DG facilities incorporate both NEM and non-NEM generators. The tariffs for calculating NEM credits for combined technology DG facilities are unclear.

10. For combined technology DG facilities, utility tariffs need to specify how the utility will treat exported NEM energy in order to assure the bill credits they are entitled to and that ratepayers do not provide unintended subsidies to non-NEM generators.

11. The record in this proceeding does not permit an allocation of costs or payments for DG facilities that include two or more NEM generators operating under different tariffs.

12. At this time, there is no evidence to suggest that non-NEM DG require utility ratepayers to subsidize the cost of needed distribution system modifications in order to assure cost-effective development of DG.

13. The active parties to this proceeding agree that there is a need to develop rules for DG interconnections to distribution systems that have a network configuration.

Conclusions of Law

1. It is reasonable to allow the utilities to estimate net generator output data for purposes of calculating a DG's cost responsibility surcharge, standby charges and other nonbypassable charges, as applicable, if the DG does not wish to install NGOM.

2. It is reasonable for Rule 21 to require a DG to install NGOM if its owner objects to the utility's estimates of CRS, standby and other nonbypassable charges.

3. The Commission should adopt the CEC's recommendations with regard to NGOM to the extent set forth herein.

4. Utility tariffs should state the utility's obligation to provide relevant detail regarding interconnection requirements where the DG developer disputes those requirements.

5. The Rule 21 Working Group should develop the procedure for providing the information and the types of information that should be included at the website regarding resolution of interconnection disputes.

6. For cases where a utility and a DG interconnection applicant are unable to resolve an interconnection dispute informally, Rule 21 should provide for a dispute resolution procedure that does not require the involvement of the Commission's Consumer Affairs Branch but instead requires the parties to request a mediator from the Commission or to engage a third party mediator by mutual agreement.

7. The utilities should be ordered to propose changes to fees for initial and supplemental application review and other interconnection processing activities in their respective electric ratemaking proceedings.

8. The utilities should be able to charge for extraordinary inspections as a way to encourage DG preparedness for the inspections.

9. For combined technology DG facilities utility tariffs should prohibit any provision or methodology that prevents export from an NEM generator even if the non-NEM generator is operating with certain protections to assure ratepayers do not unfairly subsidize non-NEM facilities.

10. In order to help assure utility ratepayers do not provide unintended subsidies to non-NEM generators in the form of bill credits where an NEM generator shares the facility, utility tariffs should provide that (1) any energy generated by the NEM generator that exceeds the customer's annual energy

usage will not be compensated; (2) in no event will non-NEM generators receive credits and tariff benefits designed for NEM generators; and (3) any combined technology DG facility must install at its cost individual meters for the separate generators or breakers that prevent export from the non-net metering generator.

11. Non-NEM generators should continue to assume the costs of infrastructure improvements required to accommodate interconnections needed for Non-NEM facilities. If any portion of the costs attributable to the non-NEM generator cannot be readily identified, the utility should calculate that portion of the cost liability according to the share of annual expected energy of the total generated by the combined technology DG facility.

12. The Working Group should be ordered to develop proposed rules for DG interconnections to distributions systems that have a network configuration and to recommend a way to allocate costs and payments between two NEM generators operating under different tariffs at the same site.

INTERIM ORDER

IT IS ORDERED that:

1. The Report and Order of the California Energy Commission (CEC) dated February 2, 2005 and tendered for filing on February 16, 2005 is hereby included in the record of this proceeding.

2. Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company shall file modifications to Rule 21 of their respective tariffs no later than six months from the effective date of this order that modify Rule 21 for each utility as follows:

- DG facilities that do not receive regulated subsidies do not need to install net generation output metering (NGOM) where less intrusive and / or more cost-effective options for providing output data are available, consistent with existing Rule 21;

- DG facilities may opt to have the utilities estimate load data for purposes of calculating a DG facility's cost responsibility surcharge if the distributed generation (DG) owner does not wish to purchase NGOM, but DG facilities on a departing load-cost responsibility surcharge (DL-CRS) tariff may opt to install NGOM if the project objects to the utility's estimates of CRS liability;
- The utility shall provide to the DG project developer all relevant regulatory and / or technical detail regarding interconnections requirements where the utility and the DG project developer dispute the utility requirements;
- For cases where a utility and a DG owner are unable to resolve an interconnection dispute informally, Rule 21 shall provide for a dispute resolution procedure that requires the parties to request a mediator from the Commission or to engage a third party mediator by mutual agreement;
- With regard to DG facilities that include an NEM-eligible generator and a generator that does not qualify for net energy metering (non-NEM): (1) any energy generated by the renewable DG that exceeds the customer's annual energy usage will not be compensated as renewable DG; (2) in no event will non-net metering generators receive credits designed for NEM projects; and (3) any DG owner operating under two tariffs must install at its cost individual meters for the separate generators or breakers that prevent export from the non-net metering generator. Otherwise, for DG facilities that operate under two tariffs applicable to different technologies, utility tariffs should prohibit any provision or methodology that prevents export from an NEM generator even if the non-NEM generator is operating;
- A cost-based charge for DG project interconnection inspections for those inspections that are extraordinary and / or follow the first inspection.

3. The Rule 21 Working Group shall develop the procedure for providing the information and the types of information that should be included at the website required herein regarding resolution of interconnection disputes

4. The Rule 21 Working Group shall develop proposed rules for DG interconnections to distribution systems that have a network configuration. It shall also propose how to allocate costs and payments for DG facilities that include two NEM generators operating under different tariffs. The Working Group shall file its recommendations on these topics with this Commission and the CEC no later than March 31, 2006; the Assigned Administrative Law Judge may change this filing date for good cause.

This order is effective today.

Dated August 25, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
JOHN A. BOHN
Commissioners

ATTACHMENT
RECOMMENDED CHANGES TO INTERCONNECTION RULES

[D0508013 Attachment re Interim Order Adopting Changes in
interconnection rules for distributed generation](#)