Decision 09-10-027 October 15, 2009

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902E) for Approval of the Celerity Distributed Generation Supply Contract.	Application 08-10-003 (Filed October 3, 2008)

DECISION APPROVING THE APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY FOR APPROVAL OF THE CELERITY DISTRIBUTED GENERATION SUPPLY CONTRACT

1. Summary

This decision grants San Diego Gas & Electric Company's (SDG&E) application for approval of the Celerity Distributed Generation supply contract. Under the terms of the contract, Celerity Energy Partners San Diego LLC (Celerity) will provide up to 25 megawatts of reliable, dispatchable power to SDG&E by aggregating and coordinating the generation from a number of relatively small diesel backup generators (BUGs). The price for this capacity is significantly lower than prices offered to SDG&E in responses to a recent solicitation for peaking resources. In addition, Celerity will install new filters on the BUGs, significantly reducing their emission rates for certain types of pollutants such as particulates and carbon monoxide. In order to ensure that ratepayers obtain these benefits, we condition our approval of the contract on Celerity obtaining approval from the Commission and the California Independent System Operator that the full contracted amount of capacity will count towards SDG&E's resource adequacy requirements, and that new emission filters are installed on all BUG units participating in this program.

2. Background

On June 9, 2004, Decision (D.) 04-06-011 approved five SDG&E proposals to meet short-term and long-term grid reliability needs. D.04-06-011 found that the Celerity Proposal (one of the five approved proposals) was directed at customers who could perform load reduction or who have existing diesel backup generators. We identified one of the key elements of the Celerity Proposal as the conversion of existing diesel units to dual-fuel units that primarily burn natural gas. D.04-06-011 concluded that the Celerity Proposal, with its operational characteristic of dual-fuel units and load-reduction arrangements, was consistent with the Demand Response Vision Statement set forth in D.03-06-032, and authorized SDG&E to complete contract negotiations with Celerity. Notably, Resolution E-3926, which approved SDG&E's demand reduction contract with Celerity, characterized the Celerity Proposal as a "dispatchable network of a variety of demand reduction resources, including load shedding or load transfer arrangements and customer-owned generation."

Our initial support for the designation of the Celerity Proposal as demand response was based in part on the assertion by SDG&E and Celerity that, under the program, existing diesel BUGs would be upgraded to dual-fuel diesel/natural gas BUGs "that primarily burn natural gas."[1] (Resolution E-3926 at 1.) Indeed, the resolution approving the contract specifically states "Celerity's demand reduction proposal allows SDG&E to drop load on short notice,

[1] Our prior statement that "Celerity will also maintain the converted units, so when the customer does utilize them, they are running cleaner and more efficiently than the diesel units did" reflects our understanding and expectation that Celerity's maintenance practices would contribute to emission reductions. (Resolution E-3926 at 1.)

improving the reliability of the grid, while the customers' operations is not disrupted, using cleaner burning backup units that benefit the environment … ." (Resolution E-3926 at 1.) Additionally, our decision authorizing contract negotiations to continue and the costs to be recoverable in rates (D.04-06-011) authorized the contract specifically as "a demand reduction proposal."[2]

However, we later explicitly rejected the use of BUGs as demand response in D.05-01-056. In particular, while we accepted SDG&E's BUGs in Resolution E-3926 because they would be used only in emergencies, we rejected Pacific Gas and Electric Company's (PG&E's) diesel/natural gas BUGs because they would be used 150 hours annually.[3] Similarly, in D.06-11-049 we rejected a PG&E BUGs demand response request and specifically rejected natural gas-fired BUGs as inconsistent with the Commission's demand response goals. We agreed with The Utility Reform Network's statement that approving a natural gas-fired BUGs project would "turn the Commission's preferred resource loading order on its head." (D.06-11-049 at 58.)

On October 3, 2008, SDG&E filed an application seeking approval of a new agreement entered into with Celerity. The new agreement between SDG&E and Celerity (the Celerity Agreement) provides for Celerity's aggregation of

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[2] "If SDG&E and Celerity reach a mutually acceptable contract for **a demand reduction proposal**, SDG&E is authorized to execute the contract and recover the costs along the same mechanism established for the Comverge contract." (D.04-06-011, Ordering Paragraph 3, emphasis added.)

[3] "PG&E's proposed program would call on these 'clean' diesel units for up to 150 hours, making them available like a peaker plant to serve ongoing demand needs, but also establishes several limitations on ability to participate in order to limit exposure to emissions from the units." (D.05-01-049 at 48.) In this decision we also directed SDG&E to no longer consider this use of BUGs as demand response.

20-25 megawatts (MW) of existing, dispatchable backup generation within SDG&E's service area. Consistent with the Commission's prior directives, the new contract presents the BUG resources as peaking capacity, rather than an as-soon-as-possible demand response program. No protests were filed in response to SDG&E's application. On November 6, 2008, the Alliance for Retail Energy Markets filed comments related to SDG&E's request for approval of the Celerity Agreement.

By its terms, the Celerity Agreement allows SDG&E to dispatch capacity from a series of diesel generators of varying sizes, in a proscribed number of MWs, up to 210 hours per year, for the life of the agreement. As written, the Celerity Agreement allows Celerity to oversubscribe participants in order to achieve the 210 hours because emissions restrictions and other factors limit the use of individual units to between 50 and 199 hours of operation per year. All MWs under the Celerity Agreement terminate at the end of 10 years from the initial implementation date (the Celerity Agreement runs from 2009-2019).

The Celerity Agreement contains provisions intended to prevent Celerity and/or the BUGs owners from promising capacity or energy to any third party. The Celerity Agreement also prevents Celerity from receiving duplicative compensation for the same capacity from any other ratepayer funded program, demand response program, emergency or backup generation program, another utility, or state or local program.

The Celerity Agreement provides a capacity price that is significantly lower than the range of capacity prices that cleared the 2008 Peaker Request for Offers (RFO). Per the Celerity Agreement, the diesel-fuel generators will be retrofitted with filters to reduce the units' emission footprint. SDG&E asserts that the generator's lowered emissions will allow the maximum dispatchable

hours to be increased to up to 210, and help qualify the energy generated for the provision of resource adequacy and energy prior to or during emergency conditions on the system.

SDG&E was the only party participating in the proceeding and the Celerity Agreement was unopposed. Consistent with our obligations and authority under Public Utilities Code Sections 451, 1001, and others, we review the application to determine, among other things, whether the facilities promote public safety, health, comfort, and convenience.

3. Discussion

In D.07-12-052 we authorized SDG&E to procure 530 MWs of new resources (including fossil-fuel resources) by 2015 in its local area if its application for the Sunrise Powerlink was denied. This authorization included 130 MWs of local peakers already approved by the Commission. D.07-12-052 also authorized SDG&E to procure the equivalent quantity of local capacity associated with any retirements of local area resources that occur beyond the amount of retirements it forecasts in its Long-Term Procurement Plan. (D.07-12-052, Ordering Paragraph 6.)

The Celerity Agreement provides capacity at a price that is significantly lower than the range of capacity prices that cleared SDG&E's 2008 Peaker RFO. However, the price of capacity alone does not fully reflect the relative value and cost of the BUG units when compared to other units bid into the 2008 Peaker RFO. For example, the limits on operating hours of the Celerity units mean the capacity may be of less value than that of a typical peaker which is available nearly all hours of the year.

Nor do the Celerity units, despite SDG&E's assertion to the contrary, meet all the criteria of SDG&E's RFO. For example, the units are not new facilities,

and they only provide limited quick start capability. In addition, SDG&E will provide diesel-fuel costs for units under the Celerity Agreement when dispatched by SDG&E. Heat rates for these units are described by SDG&E as being higher (representing a less efficient unit) than the equivalent natural gas peakers.

SDG&E indicates that the Celerity Agreement is consistent with various Commission plans and policies. In particular, SDG&E asserts that approval of the Celerity Agreement is consistent with the Energy Action Plan and greenhouse gas (GHG) standards because it "constitutes a peaking power project (with an estimated annual capacity factor less than 60%) which is not designed or intended to augment the output or extend the operating life of an existing power plant." (Application at 7, citing D.07-01-039 at 7.) According to SDG&E, the distributed generators operate like a peaking plant for capacity purposes with a capacity factor of under 5%, well below the 60% threshold and thus are not subject to the GHG standards. Further, while the hours of operation of the BUG units may be increased as a result of the contract, there is no augmentation or increase in the generating capacity of the units.

Next we consider SDG&E's claim that the Celerity Agreement improves environmental impacts by reducing particulate emissions because of the fitting of filters on existing Celerity units. The application clearly establishes the efficacy of the upgraded filters. In particular, SDG&E's testimony indicates that "… with the particulate filters, BUGs will emit less carbon monoxide, hydrocarbons and particulate matter running the 199 permitted hours than without filters running at only 50 permitted hours."

However, emission rates for other pollutants, including carbon dioxide, a GHG, are not improved by the filters. The BUG emission rate for carbon dioxide

is less than the comparable emission rates for other peaking resources, such as older gas-fired combustion turbines (CTs), 1512 lbs/mwh versus 1755 lbs/mwh, respectively. The BUG emission rate for carbon dioxide is slightly higher than the emission rates for new, efficient CTs. Thus, increasing the operating hours of these units from 50 to approximately 200 per year may result in minor increases or minor decreases in overall carbon emissions. We encourage SDG&E and Celerity to evaluate using biodiesel fuel to reduce net GHG impacts.

SDG&E also claims that, under the Celerity Agreement, the conversion of the BUGs, which currently can only operate for maintenance or in emergencies, to dispatchable units will help avoid the emergencies under which such units would normally be used. SDG&E's assertion is accurate. However, the characterization of capacity as reducing the likelihood of use as emergency generation applies to all capacity generally.

Finally, we are unconvinced by SDG&E's claim that the Celerity Agreement will decrease the likelihood of a reliability must-run (RMR) designation of the South Bay Power Plant. While there is a chance that the California Independent System Operator (CAISO) will not designate the South Bay Power Plant as an RMR facility, the Celerity's units will likely have little impact on that decision due to their relatively small amount of MWs and the uncertainty in their own resource adequacy status.

Overall, the Celerity contract appears to provide SDG&E with additional reliable peaking capacity at an attractive capacity price and without the need for new transmission facilities, by taking existing facilities and better integrating their operation to match the needs to the utility. At the same time, the installation of new filters will significantly improve the BUGs emission rates for some types of air pollutants. These benefits justify approval of the contract.

However, these benefits only occur if in fact the capacity can be used by SDG&E to meet its reliability obligations and if the pollution filters are actually installed on the facilities. Therefore, we condition our approval of the contract on the Commission and the CAISO approving the contract capacity as qualifying for resource adequacy purposes and on the installation of emission filters on all BUG units participating in this program.

4. Comments on Alternate Proposed Decision

The alternate proposed decision of Commissioner Bohn in this matter was mailed on September 14, 2009 to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.6 of the Commission's Rules of Practice and Procedure. Opening comments were filed on September 21, 2009.

5. Assignment of Proceeding

John A. Bohn is the assigned Commissioner and Darwin E. Farrar is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. On October 3, 2008, SDG&E filed an application seeking approval of an agreement entered into with Celerity.

2. The Celerity Agreement allows SDG&E to dispatch capacity from a series of diesel generators of varying sizes, in a proscribed number of MWs, up to 210 hours per year, for the life of the agreement.

3. The Celerity Agreement provides a capacity price that is lower than the range of capacity prices that cleared the 2008 Peaker RFOs.

4. The price of capacity alone does not reflect the relative value of the unit when compared to other units bid into the 2008 Peaker RFOs.

5. The capacity will be of significant value to ratepayers only if the Commission and the CAISO affirm that it counts towards SDG&E's resource adequacy requirements.

6. The local nature of the Celerity units means that new transmission facilities, and related costs, are not needed to bring the power to SDG&E's load centers.

7. For particulates and other specified types of emissions, the installation of upgraded filters will offset the increased number of hours that the units would run under the revised agreement.

8. The result of the Celerity Agreement is that there likely will be a minor change up or down, in the overall emissions of carbon dioxide.

9. It is unlikely that the CAISO would consider the Celerity units in any RMR decision regarding the South Bay facility.

Conclusions of Law

1. Because the Celerity Agreement provides a low cost, local, peaking capacity resource that meets an identified need of SDG&E's, and that it will increase the usefulness of the capacity of the BUG resources while also reducing their emission rates for many pollutants, and that it makes use of existing sites rather than necessitating the development of new greenfield sites and associated transmission facilities, the Celerity Agreement should be approved.

2. Approval of the contract should be contingent upon the units' capacity qualifying towards SDG&E's resource adequacy requirements, and upon installation of air emission filters.

3. SDG&E's request to (a) receive its testimony into evidence as Exhibits 1 and 1(C), and (b) seal the confidential information found in Exhibit 1(C) pursuant

to the confidential information guidelines set forth in D.06-06-066, should be granted.

O R D E R

IT IS ORDERED that:

1. The application of San Diego Gas & Electric Company for approval of the Celerity Distributed Generation supply contract is approved, contingent upon the Commission and the California Independent System Operator determining that the contract capacity counts towards San Diego Gas & Electric Company's resource adequacy requirements and on all backup generator units participating in this program having air emission filters installed.

2. The request by the Alliance for Retail Energy Markets, that San Diego Gas & Electric Company be directed to sell any excess local resource adequacy capacity to other load serving entities relates to San Diego Gas & Electric Company's general practices of buying and selling generation as considered in other Commission proceedings, and not to the reasonableness of the specific contract at issue in this case, is therefore beyond the scope of this proceeding and is denied.

3. San Diego Gas & Electric Company's request to receive its prepared testimony and seal the confidential versions of such testimony is granted. These documents have been marked as Exhibits 1 and 1(C), respectively. San Diego Gas & Electric Company's confidential testimony shall remain sealed for a period of three years from the effective date of this decision pursuant to Decision 06-06-066.

4. Application 08-10-003 is closed.

This order is effective today.

Dated October 15, 2009, at San Francisco, California.

JOHN A. BOHN
RACHELLE B. CHONG
TIMOTHY ALAN SIMON
Commissioners

I dissent.

/s/ MICHAEL R. PEEVEY
President

I dissent.

/s/ DIAN M. GRUENEICH
Commissioner