

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Integrate and
Refine Procurement Policies and Consider Long-
Term Procurement Plans.

Rulemaking 12-03-014
(Filed March 22, 2012)

**RESPONSE OF SAN DIEGO GAS AND ELECTRIC COMPANY
(U 902 E) TO MOTION OF MEGAWATT STORAGE FARMS**

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**I.
INTRODUCTION AND BACKGROUND**

Pursuant to Rule 11.1 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), San Diego Gas and Electric Company (“SDG&E”) provides this response to the October 5, 2012 motion filed by Megawatt Storage Farms (“MSF”) in the above-captioned proceeding (the “Motion”). The Motion proposes that the Commission issue a ruling modifying the current “loading order” adopted in California’s Energy Action Plan (the “Loading Order”). Specifically, MSF requests a Commission ruling ordering that “[s]torage be ranked first in Loading Ordering priority.”^{1/} For the reasons set forth below, the Commission should deny the Motion.

**II.
DISCUSSION**

A. The Proposed Modification of the Loading Order is Unlawful and Inconsistent with the Process Set Forth in the Energy Action Plan

The Loading Order set forth in the Energy Action Plan establishes the preferred order of resources to be used to meet the energy needs of California consumers. Energy efficiency and

^{1/} Motion, p. 2. The Motion defines “storage” as “any system which has zero greenhouse gas emissions and whose primary purpose is all four of the following: (1) taking electricity in (charging), (2) storing that energy in any form (examples include electrochemically and mechanically), (3) delivering all of that energy (aside from efficiency losses) as electricity back to the grid (discharging) and (4) is installed close to load centers.” *Id.*

demand-side resources are first, followed by renewable energy resources and distributed generation on the supply side, and finally clean conventional electricity supply.^{2/} In establishing guidelines and an implementation plan for state energy policy, the Energy Action Plan is intended to reflect, *inter alia*, “policies that have been articulated through the Governor’s Executive Orders, instructions to agencies, public positions, and appointees’ statements; the CEC’s Integrated Energy Policy Report (IEPR); CPUC and CEC processes; the agencies’ policy forums; and legislative direction.”^{3/} Indeed, the Loading Order reflects the statutory requirement that each utility “shall **first** meet its unmet resource needs through all available **energy efficiency and demand reduction resources** that are cost effective, reliable, and feasible.”^{4/} Thus, to the extent MSF’s request is interpreted as a proposal to rank energy storage first in the Loading Order before energy efficiency and demand reduction, it is unlawful. The Loading Order may not be modified to displace energy efficiency and demand reduction in favor of energy storage (or any other resource). State law requires that these resources be relied upon first by the utilities; accordingly, these resources must be ranked first in the Loading Order.

Moreover, MSF’s request for unilateral Commission action to modify the Loading Order ignores the collaborative process underlying development of the Energy Action Plan. The Energy Action Plan document (which has been reissued and update since its original adoption in 2003) is the product of a joint effort by the Commission and the California Energy Commission (“CEC”), which has “benefited from the active participation of the Business, Transportation, and Housing Agency, the Resources Agency, the State and Consumer Services Agency, the California Independent System Operator (CAISO), the California Environmental Protection

^{2/} See, e.g., Energy Action Plan II (EAP”), p. 2

^{3/} *Id.* at p. 1.

^{4/} Pub. Util. Code § 454.5(b)(9)(C). All statutory references herein are to the Public Utilities Code unless otherwise noted.

Agency (Cal EPA), and other agencies with energy-related responsibilities.”^{5/} In issuing the Energy Action Plan II, the Commission and the CEC noted that “EAP II supports and expands the commitment to cooperation among state agencies embodied in the original EAP and reflected in the State’s coordinated actions over the past two years.”^{6/} While the Energy Action Plan is “a living document meant to change with time, experience, and need,” there is no process or provision made for a single party to unilaterally modify any aspect of the Energy Action Plan – and particularly not an element as crucial as the Loading Order.^{7/} Plainly, an effort by the Commission to unilaterally modify the Energy Action Plan would directly contravene the cooperative nature of the undertaking and would call into question the legitimacy of the Energy Action Plan document. Accordingly, the Motion should be denied.

B. The Proposed Modification of the Loading Order is Premature

Assuming, *arguendo*, that the Commission has the authority to grant the Motion, SDG&E notes that there is no justification for modification of the Loading Order to rank energy storage first, or indeed to include it at all. SDG&E agrees that storage technologies may have a wide range of potential applications, both at the transmission and distribution levels, and as both controllable load and controllable supply. SDG&E supports the ongoing investigations into the capabilities of storage technologies and their suitability for addressing a variety of planning and operational challenges. It notes, however, that important questions regarding energy storage technology, its cost-effectiveness, and its implementation exist.

As support for its request, MSF asserts that energy storage “boosts conservation and energy efficiency” and will reduce natural gas use and Greenhouse Gas (“GHG”) emissions, and therefore that “Storage’s characteristics and capabilities clearly position it in the first category of

^{5/} EAP II, p. 1.

^{6/} *Id.*

^{7/} *See id.*

the Loading Order.”^{8/} The claim that energy storage technologies are equivalent or analogous to energy efficiency and demand response is not, however, entirely accurate. Unlike conservation and energy efficiency programs, which permanently reduce the amount of electricity that is required to meet end-user needs, storage devices actually require *more* electricity to meet the same end-user needs. Storage technologies do not create any new electrical energy; they must be charged from another energy source. In addition, storage technologies are net consumers of energy since there are losses in the charge/discharge cycle. To establish whether a storage technology will decrease or increase natural gas use and GHG emissions it is necessary to determine the marginal resource that supplies the charging energy, and the marginal resource that is decremented when the storage technology is discharged. This analysis is fact-specific and it is by no means obvious what the result would be compared to an alternative in which the storage technology is not available.

SDG&E does agree that there are scenarios where the availability of storage technologies could in fact result in reduced natural gas use and reduced GHG emissions as compared to alternatives where the storage technologies were not available. However, there are many other scenarios where the availability of storage technologies would actually result in an overall increase in costs, and result in increased natural gas use and increased GHG emissions, as compared to alternatives where the storage technologies were not available. Thus, more analysis is required to determine what role energy storage technologies should play in meeting California’s energy needs.

The Commission has initiated Rulemaking (“R.”) 10-12-07 to examine issues surrounding reliance on energy storage technologies. An objective of Phase 2 of R.10-12-07 is

^{8/} Motion, p. 7.

to determine appropriate targets, if any, for each load-serving entity (as defined by §380(j)) to procure viable and cost-effective energy storage systems, in accordance with Assembly Bill (“AB”) 2514.^{9/} Phase 2 of R.10-12-007 will also establish cost-effectiveness methodologies for the different use cases identified for energy storage devices. SDG&E believes that resolution of the aforementioned objectives of Phase 2 of R.10-12-007 is required prior to engaging in discussions about the role of energy storage devices in the Loading Order.

While SDG&E believes that the proposal to include energy storage technologies in the Loading Order is without merit, it submits that storage technologies should be permitted to bid into utility solicitations and should be considered along with all other feasible options for addressing transmission needs, distribution needs and local and system capacity requirements in a cost-effective manner and based on least-cost/best-fit principles.

III. CONCLUSION

For the reasons set forth above, the proposal set forth in the Motion to modify the Loading Order to rank energy storage technologies first should be denied.

Dated this 22nd day of October, 2012 in San Diego, California.

Respectfully submitted,

/s/ Aimee M. Smith

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^{9/} Stats. 2010, Ch. 469.