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SDG&E Comments on the Sept 23 Midterm Reliability Modeling Workshop

Additional submitted attachment is included below.



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October 1, 2021

Commissioner Siva Gunda California Energy Commission Docket Unit, MS-4 Docket No. 21-ESR-01 1516 Ninth Street Sacramento, CA 95814-5512

Subject: San Diego Gas & Electric Company Comments on the August 30, 2021, Midterm Reliability Analysis and Incremental Efficiency Improvements to Natural Gas Power Plants Workshop

Dear Commissioner Gunda:

San Diego Gas & Electric Company (SDG&E) appreciates this opportunity to submit comments regarding the September 23, 2021, Midterm Reliability Modeling Workshop. SDG&E, likewise, appreciates this additional workshop and the forthcoming and transparent approach in which Mr. Kootstra communicated the modeling process and interacted with stakeholders. It is clear that the California Energy Commission (CEC) is committed to ensuring a robust stakeholder process.

In the workshop, Mr. Kootstra explained that the analysis presented was not meant to measure what natural gas plants "necessarily bring to the table in terms of reliability," but rather is intended to explore the California Public Utilities Commission (CPUC) Resource Adequacy (RA) program accounting rules. While SDG&E disagrees with the CEC's approach of prioritizing RA compliance accounting rules over a true reliability assessment, it acknowledges that there is not adequate time prior to the September 30, 2021 meeting to conduct additional analysis. Accordingly, SDG&E offers the following recommendations for future reliability modeling work performed by the CEC.

SDG&E agrees with Mr. Kootstra's statement during the workshop that gas plants are so reliable that historically some plants "even have a one for one between name plate and their [Net Qualifying Capacity (NQC)] value for September." Natural gas resources are so reliable that in its current analysis, the CEC modeled this resource type at perfect capacity. Yet when *only* natural gas resources were added to the system as a scenario it led to a slightly less reliable

system.¹ This disconnect results from the analysis assuming that natural gas resources have a perfect capacity while modeling natural gas plant outages, which the CEC deemed to be a necessary assumption based on its interpretation of the CPUC's RA Program accounting rules. This analysis used forced outage rates of roughly 7.5%.

Modeling natural gas resources at perfect capacity appears to be an acceptable assumption given that the modeling primarily focused on summer months, which is when natural gas resources are least likely to experience planned outages such as for maintenance. SDG&E suggests that any subsequent modeling of gas resources model a true reliability assessment in lieu of modeling its interpretation of RA Program rules and use a consistent assumption about the performance of each resource type in particular, natural gas resources. Two options for natural gas resource scenario assumptions could be:

- 1. Consistent with the view that natural gas resources are nearly perfect capacity, scenarios would be built with a NQC of 100% * nameplate capacity and modeling would assume 0% outages for these resources.
- 2. If estimated outages are to be considered, they should be considered both in the scenario construction and in the modeling assumptions in a consistent manner. For example, if assuming a 7.5% outage factor for modeling, then the natural gas resources in the scenario should have an NQC of 92.5% * nameplate capacity.

By creating scenarios with consistent modeling assumptions, as was done for preferred resources, the CEC will be conducting an apples-to-apples analysis.

SDG&E appreciates the visual comparison, in Slide 24 below, of nameplate capacities and the additional statement that preferred resources require 4-5.6 times the name plate as compared to perfect capacity. The CEC analysis is useful as a stand-alone reliability study but without including costs and greenhouse gas (GHG) impacts it is of little use for planning purposes. As a practical matter, studying absolute scenarios, such as that *only* natural gas resources or preferred resources will be built, provides little value given that in order to achieve 2045 emission reductions and reliability goals at least cost it will likely be necessary to establish a portfolio mix of preferred resources (*e.g.*, renewables and energy storage resources) with dispatchable resources that provide critical reliability such as natural gas plants.

¹ It should be noted that the gas scenarios still met the reliability threshold of being under 0.1 LOLE.

Gas C Gas Capacity (Accounting Primary ELC Primary ELC Primary ELC Primary ELC Primary ELC Primary ELC Primary ELC Primary ELC Revised ELC Bevised ELC Bevised ELC Bevised ELC	C 2022 C 2023 C 2024 C 2025 2026+ C 2022 C 2022 C 2023 C 2024 C 2023 C 2024 C 2025			W of NG		_	 Preferred resources required 4-5.6x nameplate for 1 MW of NQC. The Gas Capacity accounting for forced outages assumes a 9% forced outage rate for gas additions.
	0	1	2 Normer	3 slate/NG	4 C Ratio	5	 This value was not used in the study and is only provided for
# 14/14/	INGC IGes		# Biomont		Geothermol		comparison.
- There							

SDG&E looks forward to continuing to work collaboratively with the CEC to help develop future Midterm Reliability Assessment analyses.

Sincerely,

/s/_ Chris A. Summers

Chris A. Summers Director of Origination, Energy Supply Dispatch SDG&E