BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

FILED
09/27/21
01:33 PM

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes.	Rulemaking 20-05-003 (Filed May 7, 2020)

COMMENTS OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) REGARDING PREFERRED SYSTEM PORTFOLIO RULING

AIMEE M. SMITH
8330 Century Park Court, CP32
San Diego, California 92123
Telephone: (858) 654-1644
Facsimile: (858) 654-1586
amsmith@sdge.com

Attorney for
SAN DIEGO GAS & ELECTRIC COMPANY

September 27, 2021

TABLE OF CONTENTS

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes.	Rulemaking 20-05-003 (Filed May 7, 2020)

COMMENTS OF SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) REGARDING PREFERRED SYSTEM PORTFOLIO RULING

I. INTRODUCTION

In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (the "Commission") and the direction set forth in the *Administrative Law Judge's Ruling Seeking Comments on the Preferred System Plan* issued on August 17, 2021("PSP Ruling"), San Diego Gas & Electric Company ("SDG&E") submits these comments in response to questions raised in the PSP Ruling.

II. RESPONSES TO QUESTIONS

1. Please comment on the individual IRP portfolio aggregation performed by Commission staff.

SDG&E's Response:

SDG&E acknowledges the challenging nature of the task and appreciates Commission staff's efforts in undertaking aggregation of the PSP. The RECART tool was useful and helped to identify issues that could impact the outcome of the modeling.

In terms of potential areas of improvement, SDG&E suggests a focus on efficiency and transparency. As additional experience with the process is gained, a goal should be to address and resolve potential issues with spreadsheets and/or other analytical processes at the outset in order to ensure that the information submitted by load-serving entities ("LSEs") is responsive and usable in the aggregation process. This effort at the beginning of the process will increase

efficiency by reducing the need for LSEs to meet with Commission staff to clarify information, resubmit spreadsheets, or otherwise make corrections that ultimately delay the process. In addition, reducing the need for revisions or corrections that are made outside of the formal filing process will increase transparency.

2. Comment on the reliability analysis of the aggregated 38 MMT LSE plans.

SDG&E's Response:

SDG&E supports the reliability analysis conducted by the Energy Division. Specifically, SDG&E agrees with the approach of examining whether the Loss of Load Expectation ("LOLE") of the PSP met the 0.1 planning standard.

3. Comment on the appropriateness of the scenarios and sensitivities developed in RESOLVE to be considered as the preferred portfolio. Suggest any alternative sensitivities or changes to the analysis.

SDG&E's Response:

SDG&E offers no comments on the RESOLVE analysis at this time but reserves the right to provide comments in the future.

4. Comment on the SERVM analysis and results of the 38 MMT Core Portfolio.

SDG&E's Response:

SDG&E offers no comments on the SERVM analysis or the results of the 38 MMT core portfolio at this time but reserves the right to provide comments in the future.

5. Comment on the appropriateness of the 38 MMT Core Portfolio as the PSP.

SDG&E's Response:

SDG&E supports the 38 MMT Core Portfolio as the PSP. Aggressive action will be required to meet the State's goal of carbon neutrality by 2045. The 38 MMT Core Portfolio will help to achieve the 2045 goal without imposing an unreasonable financial burden. In addition to adopting a 38 MMT Core Portfolio, meeting the State's carbon reduction objectives will require

electrification of other sectors of the economy. Thus, it is critical to ensure that electricity remains affordable to facilitate this transition (*e.g.*, to enable building and transportation electrification).

6. Comment on whether the load forecast assumptions should be adjusted to include higher load, particularly related to EV adoption or high electrification more broadly.

SDG&E's Response:

The Commission should seek to standardize the Integrated Resource Planning ("IRP") process and, in particular, should ensure consistency in the load forecasts used in the analysis. The best approach for doing so is to use the latest version of the Integrated Energy Policy Report ("IEPR") forecast using the mid case, except for transportation electrification which should adopt the high case. This is consistent with what was adopted in the Distribution Resource Plans ("DRP") proceeding[1/] for the Grid Needs Assessment/Distribution Deferral Opportunities Report. If there are issues with IEPR not reflecting load properly, those issues should be handled through the IEPR process.

7. Comment on the proposal to use the 38 MMT Core Portfolio as the reliability and policy-driven base case in the TPP.

SDG&E's Response:

SDG&E supports planning to more aggressive GHG targets given the long lead times associated with transmission development. As 2045 approaches, it will likely be necessary to establish goals that are even more ambitious than the Senate Bill ("SB") 100 targets in the 10-year horizon. This will ensure that the scenarios studied in the Transmission Planning Process ("TPP") are as accurate as possible.

[1/] R.14-08-013.

8. Comment on the proposed policy-driven sensitivity portfolio for the TPP based on the 30 MMT GHG limit in 2030 with the high electrification load assumptions. Suggest any additional or alternative scenarios that should be analyzed as policy-driven sensitivities.

SDG&E's Response:

The TPP should account for long lead times associated with transmission development so that the system is prepared for all scenarios, and to ensure that technology advances are not restricted due to factors such as insufficient transmission capacity. It makes sense to plan for scenarios that create optionality – *e.g.*, the high electrification load scenario – so that it is possible to pursue the solutions that provide the optimal path for achieving California's climate goals; the high electrification load scenario also synergizes well with the high battery penetration scenario and the associated high charging loads. The California Independent System Operator ("CAISO") should provide feedback regarding the capability of the transmission system to handle high charging loads associated with batteries and electric vehicles ("EVs"). Both scenarios require significant load increase, so it is important to understand any potential transmission-related roadblocks to California's climate goals.

In addition, SDG&E suggests consideration of expanding the TPP timeframe from 10 years to 12 or 15 years to account for the aforementioned lead times associated with transmission development. This will minimize the chances of procedural obstacle related to transmission development causing reliability issues in real time operations.

9. Comment on whether and how the Commission should act to encourage specific non-transmission alternatives to be built, if identified as part of the CAISO TPP process, both for the two specific projects identified in the 2020-2021 TPP, as well as in general for future such opportunities.

SDG&E's Response:

SDG&E has no comment at this time regarding whether and how the Commission should act to encourage specific non-transmission alternatives to be built but reserves the right to

provide comments in the future. SDG&E notes that generation developers already have the ability under the Federal Energy Regulatory Commission's ("FERC's") open access rules to build resources and interconnect to the transmission and distribution systems at locations where transmission constraints result in increased market clearing prices.

10. Comment on the options raised in Section 7.2 of this ruling to address procurement for system benefit more broadly. Suggest whether and how a particular cost recovery framework can be adopted quickly or discuss additional considerations that should be explored.

SDG&E's Response:

Please see the response to Question 9. SDG&E offer no further comments regarding cost recovery framework related to Section 7.2 at this time but reserves the right to provide comments in the future.

11. Comment on the busbar mapping approach.

SDG&E's Response:

SDG&E generally supports increased scope and granularity in the busbar mapping process. This would improve the accuracy of results and ensure that resulting portfolios are more aligned with local transmission capabilities.

Additionally, busbar mapping is important in the context of risk prevention. In particular, quantifying the risks associated with a major natural event occurring along major transmission paths. Mapping resources closer to load areas would be helpful in this respect. If, for example, most of the resources are concentrated in one part of the system, the resulting lack of resiliency and diversity of location could pose a serious threat to the reliability of the larger transmission system. This would be true if a major natural event (such as a wildfire or earthquake) were to occur in close proximity to where the generation or transmission resources are located, thus

causing an outage of such resources. These types of major natural events have occurred many times in the past and may necessitate siting resources closer to load centers.

12. Comment on whether the Commission should require the procurement of resources contained in the individual IRP filings and have LSEs face penalties and/or backstop procurement requirements with cost allocation arrangements, similar to those for D.19-11-016 and D.21-06-035.

SDG&E's Response:

The Commission should not mandate the procurement of resources contained in LSEs individual IRP ("IIRP") filings. Nor should the Commission institute a penalty structure for failure to procure resources within IIRPs or impose backstop requirements and cost allocation arrangements similar to those established in Decision ("D.") 19-11-016 and D.21-06-035 if an LSE does not procure what is reflected in its IIRP.

First, the IRP is by definition a *planning* exercise. As the energy space changes, it is critical that LSEs have the ability to adapt to those changes, whether it is by reducing their portfolio due to load departure, increasing resource procurement in response to higher load or more customers, or changing the general makeup of the portfolio in response to policy or technology imperatives. As such, the planned resources included in IIRPs are conceptual until such time that the resources are needed and procured.

Second, in many cases, LSEs hold competitive solicitations and choose from a range of conforming bids. It is possible that the conforming bids available will not match the resources in the IIRPs or there could be quantitative or qualitative advantages to choosing a certain resource over another that are not apparent until the solicitation is held. For example, if an LSE stated in its IIRP that it would procure 50 MWs of solar and 50 MWs of wind, but the solicitation resulted in 80 MWs of solar and 20 MWs of battery storage as the best value for customers, it would be logical to deviate from the theoretical resource mix presented in the IIRP, provided that the

necessary resource attributes can still be secured. Similarly, it is possible that certain resources planned for in the IIRP will not show up in the solicitation or are more expensive than a comparable bid with a different resource. Thus, it is not reasonable for the Commission to require procurement of the theoretical resource mix presented in LSEs' IIRPs.

Finally, resource procurement orders issued by the Commission in any procurement proceeding impact IIRP planning efforts. Procurement orders issued after an IIRP is filed will impact the makeup of what is/is not needed in the IRP. For example, if in the Electric Reliability proceeding (R.20-11-003) an LSE is ordered to procure 20 MWs but procures a 50 MW resource because it is more affordable, the result could be a change in the resource makeup and the volume of MWs that are now needed in the IIRP. Accordingly, the Commission should not mandate procurement of resources within each LSEs' IIRPs and, likewise, should not require backstop procurement with cost allocation.

13. Comment on whether you would prefer an approach where the Commission determines procurement need for GHG-free resources or the GHG-free attributes of resources at the system level and then uses a need allocation methodology to assign procurement to individual LSEs. If you propose this type of alternative approach, please address the following aspects:

- ***a. Need allocation, by year***
- ***b. How to address new and existing resources***
- ***c. Whether procurement should be all-source or resource-specific***
- ***d. Resource attributes required (MW, MWh, percentage of GHG-free energy, etc.)***
- ***e. Duration (through 2030, 2032, interim milestones, etc.)***
- ***f. Cost allocation***
- ***g. Compliance, monitoring, and enforcement arrangements.***

SDG&E's Response:

The IRP should be a holistic process where both reliability and greenhouse gas ("GHG") emissions reduction are considered together. However, if an LSE fails to meet its GHG emissions reduction targets, the Commission should assign the necessary procurement to bring that LSE back into compliance. This can be determined during the IRP aggregation phase prior to the completion of the PSP with the actual procurement order being assigned in the procurement track.

Generally, the resource type of procurement that is ordered should be all-source rather than resource-specific to offer maximum flexibility to the deficient LSE. However, the MWs needed to be procured can be further modified by any potential reliability need or reliability concern that may exist for the specific LSE. The Commission could further modify this based on the portfolio of the LSE. For example, if an LSE had a larger share of solar resources the Commission should consider the reliability impacts and order GHG-free resources that provide more capacity in non-daylight hours.

The duration of the contract can be determined by the length of the GHG emissions reduction deficiency. At a minimum, the contract term should run through the last year of the deficiency, or the final planning year. There is no need for cost allocation since the cost is the sole responsibility of the deficient LSE.

14. If you believe the Commission should take more of a programmatic approach to GHG-beneficial procurement, explain the process you recommend and your rationale.

SDG&E's Response:

SDG&E does not believe a programmatic approach to GHG-beneficial procurement is necessary. The IRP process serves that purpose and if LSEs remain below their GHG targets, they are on the correct path toward achievement of California's climate goals.

15. Comment on whether and how much procurement required in D.21-06-035 should be accelerated to 2023 and/or suggest additional actions to facilitate additional resources in response to the Governor's Proclamation from July 30, 2021

SDG&E's Response:

With regard to accelerated procurement, SDG&E has offered proposals in the Electric Reliability proceeding (R.20-11-003) to increase peak and net peak supply resources in 2022 and 2023.[2/] In offering these proposals, SDG&E also noted, among other things, that greater transparency is required to determine the accuracy of the need analysis. SDG&E offered the following proposals in R.20-11-003:

1. To support the goal of expedited procurement, the Commission should provide guidance regarding cost recovery for resources that are capable of providing additional capacity but are not eligible to be counted toward Resource Adequacy ("RA") program requirements; and

2. The Commission should support streamlining of the interconnection process to enable more resources to come online in 2022 and 2023.

In addition, SDG&E proposed 20 MWs of energy storage resources in response to Governor Newsom's Proclamation in the Commission's Microgrid proceeding (R.19-09-009).[3/] SDG&E offers no further comment at this time regarding additional actions to facilitate incremental resources in response to the Governor's Proclamation.

[2/] *Prepared Phase 2 Direct Testimony of San Diego Gas & Electric Company Regarding Supply Side Proposal For Increasing Peak and Net Peak Supply Resources in 2022 and 2023 and Comments On Energy Division Staff Concept Paper*, served in R.20-11-003 on September 1, 2021.

[3/] *See Response of San Diego Gas & Electric Company to Administrative Law Judge's Ruling on Potential Microgrid and Resiliency Solutions for Commission Reliability Action to Address Governor Newsom's July 30, 2021, Proclamation of a State of Emergency*, filed in R.19-09-009 on September 10, 2021.

16. Comment on the CEC's MTR reliability analysis, the determinations regarding the need for fossil-fueled generation resources, and the actions, if any, that the Commission should take as a result.

SDG&E's Response:

Please see Attachment A, SDG&E's September 7, 2021 comments to the California Energy Commission ("CEC") regarding its mid-term reliability assessment workshop results on fossil fuel resource reliability. Until and unless the CEC corrects its modeling, the Commission must not make decisions based on the takeaway that fossil fuel resources and preferred resources provide equivalent reliability. As it stands, the analysis is flawed and cannot be relied upon.

17. Comment on the definition of eligible renewable hydrogen proposed in this ruling.

SDG&E's Response:

The PSP Ruling recommends using Commission's recent decision (D.21-06-005) in the self-generation incentive program ("SGIP") regarding the use of renewable hydrogen for behind-the-meter ("BTM") electricity generation and types of renewable hydrogen eligible for SGIP incentives. The Commission should instead adopt a comprehensive singular definition of eligible renewable hydrogen or "green hydrogen" for the state of California and/or a directive from the CEC to address requirements for renewable hydrogen under the Renewables Portfolio Standard ("RPS") program in the future.

Until such a comprehensive definition and requirements exist, SDG&E recommends maintaining the definition from SB 1369: "For the purposes of this article, "green electrolytic hydrogen" means hydrogen gas produced through electrolysis and does not include hydrogen gas manufactured using steam reforming or any other conversion technology that produces hydrogen from a fossil fuel feedstock."

The definition of eligible renewable hydrogen adopted for SGIP pursuant to D.21-06-005 is not workable in other contexts; while hydrogen inclusion from electrolysis using 100 percent renewable electricity is effective for BTM customer-owned resources, it is overly burdensome at this time when considering hydrogen adoption at scale for a utility-scale power plant through 2035. The volumes of hydrogen for utility-scale power plants are significantly higher than what would be required for BTM SGIP resources and electrolytic hydrogen production may need to rely on power from the grid to achieve affordability since electrolyzers are very expensive and the more they are able to run, the lower the cost of the hydrogen becomes. Additionally, utility-scale power plants might need to run longer than SGIP resources in order to meet grid needs and/or reliability and thus need the added flexibility of less than 100 percent renewable electricity to meet those run needs. Finally, SDG&E notes that its reply comments filed on May 24, 2021 in the SGIP proceeding, Rulemaking (R.) 20-05-012,[4/] support the new definition of renewable hydrogen proposed by Pacific Gas and Electric Company ("PG&E"), which is reflected above in these comments.[5/]

18. Comment on the percentage of renewable hydrogen facilities that should be required, if any, and the timing of the transition from a blend to full renewable hydrogen combustion, including the option for inclusion of fuel cells. Discuss the feasibility and cost of achieving a 100 percent renewable hydrogen blend by 2036 in your comments.

SDG&E's Response:

SDG&E supports all new natural gas facilities and natural gas facility enhancements having the ability and capacity to meet hydrogen blending targets that would allow for the

---

[4/] *Reply Comments of San Diego Gas & Electric Company on Proposed Decision Revising Self-Generation Incentive Program Renewable Generation Technology Program Requirements and Other Matters*, filed in R.20-05-012 on May 24, 2021, p. 1.

[5/] *Pacific Gas and Electric Company's Opening Comments on Proposed Decision Revising Self-Generation Incentive Program Renewable Generation Technology Program Requirements and Other Matters* , filed in R.20-05-012 on May 19, 2021, pp. 3-4.

facilities to eventually operate on 100 percent renewable hydrogen by the end of the contract period or 2045, whichever comes sooner, thereby supporting California's grid with vital clean firm resources.

As a practical matter, achieving a 100 percent renewable fuel source by 2036 may be challenging from a supply perspective and also expensive; thus, allowing the market to dictate timing through contract terms can best serve the system and the ratepayer while ensuring the state has adequate clean and reliable firm power resources by 2045.

Commercially available turbine technology in existence today allows for plants to combust a blend of natural gas and hydrogen with the ability to ultimately transition to 100 percent hydrogen combustion. Designing new plants from day one for the clean energy transition will make new and enhanced facilities more affordable since they will not need to be significantly retrofitted before depreciation.

By establishing a hydrogen target for capacity at existing sites (enhancements) as well as new facilities, the Commission would provide the market with critical certainty and signals required to develop a scaled, affordable, and reliable supply of renewable hydrogen. To develop a scaled, affordable, and reliable supply of renewable hydrogen in the volumes needed to meet California's climate goals, investments will need to be made sooner rather than later. Creating the large volumes of renewable hydrogen required for clean firm power requires new infrastructure all along the hydrogen value chain, including the generation, storage, and transport of hydrogen. This is all long lead time ("LLT") infrastructure, so the sooner market signals are available, the more likely it is that the goal of 100 percent renewable hydrogen by 2045 or sooner will be met.

Factors that may affect the cost of renewable hydrogen in the coming years include the passage of the Federal Production Tax Credit for green hydrogen, income tax credits for solar production, hydrogen hub development in various cities and communities, and hydrogen transport and storage costs (*e.g.*, pipeline infrastructure versus trucking from production to end use).

Fuel cells will play a limited role in the clean energy grid-scale future, however, to achieve system reliability, hydrogen combustion must also be included as a clean firm power resource through 2045 and beyond.

19. Comment on proposed measures regarding NOx emissions from facilities using renewable hydrogen.

SDG&E's Response:

SDG&E generally supports the proposed measures to employ equipment to reduce NOx emissions. It would be helpful to understand how the Commission defines and measures "actual emissions" before committing to maintaining or reducing levels of NOx emissions compared to natural gas plants.

20. Comment on whether the Commission should take any initial actions on geographically-targeted procurement, particularly with respect to Aliso Canyon, or more broadly, and respond to the factors discussed in Section 12 of this ruling.

SDG&E's Response:

SDG&E offers no comments at this time regarding whether the Commission should take any initial actions on geographically-targeted procurement but reserves the right to comment on this issue in the future.

21. Comment on whether and how the Commission should act to preserve transmission deliverability rights in the central coast area that could be utilized for offshore wind or other resources.

SDG&E's Response:

SDG&E offers no comments at this time regarding whether and how the Commission should act to preserve transmission deliverability rights in the central coast area that could be utilized for offshore wind or other resources but reserves the right to comment on this issue in the future.

22. Comment on the amount of offshore wind, if any, that should be included in the 2022-2023 TPP base case. Comment on how the results of the 2021-2022 TPP offshore wind sensitivity case should influence this issue.

SDG&E's Response:

SDG&E offers no comments at this time regarding the amount of offshore wind to be included in the 2022-2023 TPP base case but reserves the right to comment on this issue in the future.

23. Comment on whether and how the Commission should act to support the development of OOS renewables/wind and the transmission to deliver it. Be as concrete and specific as possible in your recommendations.

SDG&E's Response:

SDG&E encourages a complete review of all resource options. To minimize the impact to ratepayers, the most economical solution should be chosen that still meets reliability, environmental, and other goals.

24. Comment on specific actions the Commission can take to ensure retention of existing resources needed both for reliability and/or GHG emissions purposes.

SDG&E's Response:

The Commission is limited in its ability to enforce LSE-specific retention of resources. However, it is important to note that if a resource is needed to stay online after a contract is over

it will either be re-contracted or made available to the CAISO as a merchant plant. Given the trajectory of resource procurement in the future, it is reasonable to expect that resources will be needed by LSEs and will contract accordingly.

25. For any of the potential procurement requirements discussed in this ruling, allocation of need to LSEs is a required step. Comment on how the methodologies should account for in-CAISO POU load and what steps the Commission should take to ensure those POUs bear their share of responsibility for reliability and GHG impacts.

SDG&E's Response:

The IEPR forecast includes in-CAISO Publicly-Owned Utility ("POU") load, thus the resource buildout in the PSP is reflective of POU needs. The Commission should calculate in-CAISO POU procurement by using the load share method (in lieu of a superior option, like assigning procurement by need), then work toward aligning POU planned procurement with the need(s) identified by the Commission. It is possible the POUs will voluntarily procure the amounts identified by the Commission if they are not already planning on doing so. The Commission should exclude the identified POU need from any procurement orders assigned to Commission-jurisdictional LSEs.

Respectfully submitted this 27th day of September, 2021.

/s/ Aimee M. Smith
AIMEE M. SMITH

8330 Century Park Court, CP32D
San Diego, California 92123
Telephone: (858) 654-1644
Facsimile: (858) 654-1586
E-mail: amsmith@sdge.com

Attorney for:
SAN DIEGO GAS & ELECTRIC COMPANY

Attachment A

SDG&E Comments to the California Energy Commission
Regarding Mid-Term Reliability Assessment Workshop

Chris A. Summers
Director
Origination, Energy Supply Dispatch
SDG&E
8362 Century Park Ct.
San Diego, CA 92123

September 7, 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 the opportunity to submit comments regarding the August 30, 2021, Midterm Reliability Analysis and Incremental Efficiency Improvements to Natural Gas Power Plants Workshop. SDG&E agrees with the goals of the Midterm Reliability Assessment and appreciates the public process by which it was shared with stakeholders.

The workshop aimed, in part, to answer the question of whether incremental thermal resources provide an additional reliability benefit compared to a portfolio of preferred resources. SDG&E agrees it is important to analyze midterm reliability and explore hypothetical resource portfolios, however, the CEC's takeaway that the gas portfolio is less reliable than preferred resource portfolios is inaccurate since the takeaway is founded on inconsistent approaches to developing the hypothetical gas portfolios versus preferred resource portfolios.[1]

[1] CEC Presentation for August 30 Lead Commissioner Workshop on Midterm Reliability Analysis, slide 32. Available here: https://efiling.energy.ca.gov/GetDocument.aspx?tn=239554&DocumentContentId=72991

To determine reliability of the various scenarios, the CEC used a two-step process which first created the resource portfolios to hypothetically replace planned resources in the California Public Utility Commission's (CPUC) Proposed Preferred System Portfolio (Proposed PSP),[2] then the CEC tested the hypothetical portfolios for reliability using Loss of Load Expectation (LOLE) analysis.

For the preferred resource scenarios, the CEC used Effective Load Carrying Capacity (ELCC) values to develop the portfolios.[3] This is not the same methodology used to develop the gas portfolio. Importantly, when developing the hypothetical preferred resource portfolios, the ELCC values include outage rates and other deliverability characteristics of the preferred resources, which results in more MWs being required in each respective preferred resource scenario.

However, for the hypothetical gas scenario, ELCC values were not used when developing the portfolio, because they do not exist for gas resources. Instead, the CEC incorrectly used nameplate capacity to develop the gas portfolio which essentially treats gas resources as "perfect capacity" units, not factoring in the average outage rate of approximately 7.5% (according to the CEC). Essentially, unlike preferred resource portfolios, the gas portfolio was underbuilt, which led to the incorrect takeaway that the gas portfolio is less reliable than the preferred resource portfolios.

At the Workshop, CPUC Commissioner Rechtschaffen highlighted the "counterintuitive" results when modeling gas resources. CEC analyst Mark Kootstra acknowledged that the results of the analysis were "complex" due to several factors, including inconsistent treatment of gas versus preferred resources[4]

Mr. Kootstra's expectation was that when "the ELCC values are being done right, we're still going to see a little bit of a difference because **[the] gas [portfolio] does not include forced outages, so you're not quite comparing apples to apples.**"[5] This statement confirms that the hypothetical gas portfolio was not developed properly because it did not factor in outage rates. It is important to note, this is not a disagreement over a modeling assumption, rather, this is an error in modeling that must be addressed.

SDG&E recommends the CEC correctly develop the gas portfolio by factoring in an appropriate outage rate to ensure the results of the reliability analysis are accurate before making assumptions about the reliability of a gas resources portfolio.[6]

---

[2] *See* Administrative Law Judge's Ruling Seeking Comments on the Preferred System Plan, issued on August 17, 2021.

[3] The CEC acknowledged the ELCC values being used for their midterm reliability assessment should be updated when the CPUC issues its latest ELCC report.

[4] CEC Midterm Reliability Assessment Zoom Workshop; beginning hour 1, minute 10. Available here: https://efiling.energy.ca.gov/GetDocument.aspx?tn=239555&DocumentContentId=72992

[5] *Id*; hour 1 minute 14 (emphasis added).

[6] If the CEC does not adopt SDG&E's recommendation to correct the gas portfolio and include outage rates, the CEC should remove the gas scenario from its final analysis and explain why the gas scenario

SDG&E looks forward to working collaboratively with the CEC to help develop the Midterm Reliability Assessment final analysis.

Sincerely,

/s/ Chris A. Summers

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

was removed and cannot be relied upon; or caveat the graph contained in the analysis to ensure stakeholders understand the inconsistency in the portfolio development approach, and remove the takeaway that preferred resources can provide equivalent system reliability to gas resources, considering that key takeaway is based on flawed analysis.