

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



**FILED**

10/21/21  
04:59 PM

Order Instituting Rulemaking to Continue  
Electricity Integrated Resource Planning and  
Related Procurement Processes

Rulemaking 20-05-003  
(Filed May 7, 2020)

**OPENING COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY  
(U 39 E) ON ADMINISTRATIVE LAW JUDGE'S RULING INVITING  
COMMENTS ON THE CPUC'S NATURAL GAS UPGRADES STAFF  
PAPER**

DANIEL S. HASHIMI  
TYSON R. SMITH

Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, CA 94105  
Telephone: (818) 388-1711  
Facsimile: (415) 973-5520  
E-Mail: Daniel.Hashimi@pge.com

Attorneys for  
PACIFIC GAS AND ELECTRIC COMPANY

Dated: October 21, 2021

## TABLE OF CONTENTS

	Page
I. INTRODUCTION .....	1
II. PG&E’S COMMENTS ON THE ISSUES RAISED IN THE STAFF PAPER.....	2
A. PG&E Agrees with the CEC’s Mid-Term Reliability Analysis Findings Summarized in the Staff Paper .....	2
B. PG&E Shares Staff’s Concern Related to the Risk of Bringing an Unprecedented Amount of New Capacity (~30 gigawatts (“GW”)) Online Over the Next Five Years and Does Not Oppose Allowing Upgrades to Existing Natural Gas Plants as a Portion of the MTR Procurement3 .....	3
C. Natural Gas Plant Procurement Should be Permitted (Not Mandated) for All LSEs to Meet a Portion of Their MTR Procurement Obligation.....	4
D. If the Commission Mandates the Procurement of Natural Gas Plant Upgrades, Then Responsibility Should Be Assigned to All LSEs .....	4
E. Recognizing the Risk Associated with the Aging Gas Fleet, PG&E Recommends a Systematic and Collaborative Approach Between the CAISO and the Commission for Existing Resource Retention/Retirement Planning .....	5
III. PG&E’S RESPONSES TO QUESTIONS IN THE RULING .....	6
Q1. The assumptions and conclusions of the RESOLVE analysis that includes gas capacity upgrades as a candidate resource. ....	6
Q2. Whether gas capacity upgrades at existing sites should be considered as eligible resources for the procurement requirements of D.21-06-035? If so, which of the various procurement process steps of D.21-06-035 would need to be amended, and how? .....	9
Q3. Whether load serving entities that wish to contract with gas capacity upgrades at existing sites, if permitted by the Commission, should be required to demonstrate that they first attempted to procure non-emitting resources. If so, what should this demonstration consist of, and on what timeframe? .....	11
Q4. If the Commission allows gas capacity upgrades at existing sites, whether the Commission should restrict or prohibit gas capacity upgrades in disadvantaged communities, as defined by the CalEnviroScreen tool, or impose some other/additional criteria. ....	12
IV. ADDITIONAL RELATED COMMENTS.....	13
V. CONCLUSION.....	13

## **TABLE OF AUTHORITIES**

**Page**

### **CALIFORNIA PUBLIC UTILITIES COMMISSION**

#### ***Decisions***

D.20-12-044 .....	11
D.21-05-030 .....	6
D.21-06-035 .....	<i>passim</i>

#### ***Other Authority***

E-Mail Ruling Inviting Comments on Natural Gas Issues (Oct. 13, 2021) .....	1
---	---

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

Order Instituting Rulemaking to Continue  
Electricity Integrated Resource Planning and  
Related Procurement Processes

Rulemaking 20-05-003  
(Filed May 7, 2020)

**OPENING COMMENTS OF PACIFIC GAS AND ELECTRIC COMPANY  
(U 39 E) ON ADMINISTRATIVE LAW JUDGE’S RULING INVITING  
COMMENTS ON THE CPUC’S NATURAL GAS UPGRADES STAFF  
PAPER**

**I. INTRODUCTION**

Pursuant to Administrative Law Judge Julie Fitch’s e-mail ruling (“Ruling”) issued October 13, 2021, inviting comments on the California Energy Commission’s (“CEC”) final Mid-Term Reliability Analysis (“CEC Analysis”) and the California Public Utilities Commission (“Commission” or “CPUC”) Staff’s paper (“Staff Paper”) on consideration of natural gas plant capacity upgrades, Pacific Gas and Electric Company (“PG&E”) submits these Opening Comments.

The Staff Paper provides valuable insight on ways to address the mid-term reliability need, including ways for the Commission and the Joint-Agencies to ensure that mid-term reliability needs are achieved through a least cost delivery of electricity in light of the current operational realities as the state’s electric grid transitions to a significantly different resource mix and decarbonizes the transportation and building sectors. In the Mid-Term Reliability (“MTR”) Decision (“D.”) 21-06-035, the Commission acknowledged the importance of maintaining reliability within the context of achieving the state’s greenhouse gas (“GHG”) emission reductions and stated “the potential for a destabilized electric grid and unreliable service if we fail to plan appropriately for the transition is a very serious threat to our ability to realize our long-term [environmental] goals.”<sup>1/</sup> PG&E agrees there is a salient link between a reliable electric system and a clean California. PG&E also appreciates the reliability risks identified in

---

<sup>1/</sup> D.21-06-035, p. 39.

the Staff Paper and largely supports the Staff’s findings in the paper which considers retention of existing natural gas plants, the potential for natural gas plant capacity upgrades at existing sites as a part of the MTR procurement, and associated system reliability and/or economic benefits.<sup>2/</sup>

In Section II of these Opening Comments, PG&E offers its perspectives and recommendations on the Staff Paper followed by specific responses to the questions posed in the Ruling in Section III. Section IV provides a few additional comments for the Commission’s consideration on related topics covered by the questions posed by the Ruling and the Staff Paper. Finally, in Section V PG&E offers brief concluding remarks.

## **II. PG&E’S COMMENTS ON THE ISSUES RAISED IN THE STAFF PAPER**

### **A. PG&E Agrees with the CEC’s Mid-Term Reliability Analysis Findings Summarized in the Staff Paper.**

The CEC Analysis concludes that a system portfolio with the inclusion of the MTR procurement order is sufficient to meet the industry standard 0.1 Loss of Load Expectation (“LOLE”). PG&E agrees with this finding. This finding is supported by independent analysis performed by both PG&E and Southern California Edison Company (“SCE”) that arrived at a similar conclusion.<sup>3/</sup> As noted in PG&E’s and SCE’s Opening Comments on the *Administrative Law Judge’s Ruling on the Proposed Preferred System Plan*, accounting for and including the MTR procurement on the California Independent System Operator (“CAISO”) system, the CAISO system will have sufficient capacity on a planning basis to stay below 0.1 LOLE through

---

<sup>2/</sup> While PG&E generally supports the conclusions of the Staff’s paper, the inputs and assumptions used in the analysis may need further review and updating as described below in response to Question 1.

<sup>3/</sup> Opening Comments of PG&E on Administrative Law Judge’s Ruling Seeking Comments on the Proposed Preferred System Plan (Sept. 27, 2021), p. 10; Southern California Edison Company’s Comments on Administrative Law Judge’s Ruling Seeking Comments on Proposed Preferred System Plan (Sept. 27, 2021), p. 12.

2030.<sup>4/</sup> As such, PG&E agrees with the reliability assessments of the CEC Analysis concluding that the electric grid system with the inclusion of the MTR procurement will be reliable.

**B. PG&E Shares Staff's Concern Related to the Risk of Bringing an Unprecedented Amount of New Capacity (~30 gigawatts ("GW")) Online Over the Next Five Years<sup>5/</sup> and Does Not Oppose Allowing Upgrades to Existing Natural Gas Plants as a Portion of the MTR Procurement.**

The CEC Analysis indicates that “[t]he ability to scale battery storage from only ~2 GW in summer 2021 to over 12.5 GW by summer 2025 represents a singular challenge with a host of risks.”<sup>6/</sup> Recognizing this potential risk, PG&E does not oppose the Commission allowing capacity upgrades to existing natural gas plants to satisfy a portion of the MTR procurement order toward achieving the goal of maintaining system reliability. Having the option to upgrade existing natural gas plants’ capacity has the potential to counterbalance potential delays in the MTR procurement and serve as an insurance plan to mitigate unforeseen circumstances.

---

<sup>4/</sup> Opening Comments of PG&E on the Administrative Law Judge’s Ruling on the Proposed Preferred System Plan (“PSP Ruling”) (Sept. 27, 2021), pp 8-10, 13, A-1; SCE Comments on Administrative Law Judge’s Ruling Seeking Comments on Proposed Preferred System Plan (Sept. 27, 2021), pp. 11-12.

<sup>5/</sup> In opening Comments on the proposed MTR decision (June 10, 2021), PG&E noted that the [CAISO received 373 interconnection requests in cluster 14, p. 3](#). Due to this the significant increase in interconnection requests, resources not currently in the interconnection queue seeking incremental capacity will be delayed until at least 2023 – not inclusive of construction timelines and cluster windows which will add additional time to the earliest date for new resources to come online.

<sup>6/</sup> Staff Paper p. 4.

**C. Natural Gas Plant Procurement Should be Permitted (Not Mandated) for All LSEs to Meet a Portion of Their MTR Procurement Obligation**

The CEC Analysis demonstrated that a portfolio containing the MTR procurement of 11,500 megawatts (“MWs”) of preferred resources results in a lower LOLE relative to a portfolio containing procurement of only natural gas plants. In light of this, PG&E believes that load serving entities (“LSEs”) should first attempt to procure non-emitting resources, as directed by D.21-06-035, prior to pursuing natural gas capacity upgrades. In Section III of these Opening Comments in response to Question 3 from the Ruling, PG&E offers recommendations for how LSEs may demonstrate good faith efforts towards pursuing non-emitting resources first prior to considering natural gas plant capacity upgrades.

**D. If the Commission Mandates the Procurement of Natural Gas Plant Upgrades, Then Responsibility Should Be Assigned to All LSEs.**

Maintaining system reliability is a shared responsibility for all LSEs and each must equitably share in upholding this responsibility. To the extent the Commission directs (versus permitting) the procurement of natural gas resources, PG&E believes that all LSEs must fulfill their shared role and responsibility in this regard.

To be clear, to the extent the Commission deems the procurement of natural gas resources necessary for midterm reliability, PG&E firmly recommends that the Commission allocate such a procurement requirement to all LSEs.<sup>7/</sup> However, in the off chance that the Commission orders the IOUs to procure natural gas resources on behalf of all LSEs, as was originally contemplated by the proposed decision and alternate proposed decision addressing the MTR procurement earlier this year, PG&E recommends that the costs associated with such procurement and the carbon footprint allocation be equitably spread to all LSEs.

PG&E recommends cost allocation mechanism (“CAM”) treatment for procurement related to natural gas plants and requests that the Commission coordinate with the CEC to

---

<sup>7/</sup> Similar to other LSEs, PG&E has been fully supportive of the state’s decarbonization goals and has been consistently one of the top utilities providing clean energy resources to its customers.

develop an approach for the allocation of GHG emissions.<sup>8/</sup> The allocation of GHG-emitting attributes from resources procured by the IOUs on behalf of all customers remains an unresolved issue that must be addressed, especially if the IOUs procure more natural gas plants on behalf of all LSEs.

**E. Recognizing the Risk Associated with the Aging Gas Fleet, PG&E Recommends a Systematic and Collaborative Approach Between the CAISO and the Commission for Existing Resource Retention/Retirement Planning.**

As noted in the Staff Paper, there is a “potential reliability risk from early retirement of the aging natural gas fleet, including older combustion turbines and CHP units rolling off long-term qualifying facility (“QF”) settlements. The CAISO has increasingly used its reliability must-run (“RMR”) backstop procurement process, with five plants currently under RMR designation including three CHP plants seeking retirement but retained for system reliability purposes.”<sup>9/</sup> PG&E recognizes this risk and notes that from a long-term decarbonization perspective, it may be beneficial to allow older, inefficient power plants to retire, while making efficiency improvements and capacity upgrades at newer, more efficient plants. It may be better to retain and upgrade some more efficient natural gas capacity that operates infrequently if that increases the likelihood of electric vehicle (“EV”) and heat pump adoption by consumers unsure of electric reliability.<sup>10/</sup> However, to ensure that the retirement of the aging fleet does not create a reliability issue that could result in costly emergency procurement options, PG&E asks the Commission to systematically review the reliability issues associated with the retirements of the aging fleet and develop effective solutions. Since some of these resources are in local areas, coordination with the CAISO will be required to ensure that the replacement capacity planning addresses location specific resource needs driven by transmission limitations. CAISO is in the best position to provide details of location specific resource requirements and support the

---

<sup>8/</sup> For additional recommendations, see *Opening Comments of Pacific Gas and Electric Company on Proposed Decision of Administrative Law Judge Fitch Requiring Procurement To Address Mid-Term Reliability and the Alternate Proposed Decision*. (June 10, 2021)

<sup>9/</sup> Staff Paper, p. 6.

<sup>10/</sup> PG&E would add that increased adoption of the two technologies is critical for the state to decarbonize the transport and building sectors in any economy-wide approach.



identification of a cost-effectiveness integrated solution (portfolio of resources/transmission alternatives) to adequately address location specific requirements.

### **III. PG&E'S RESPONSES TO QUESTIONS IN THE RULING**

#### **Q1. The assumptions and conclusions of the RESOLVE analysis that includes gas capacity upgrades as a candidate resource.**

PG&E applauds the Commission's effort to systematically identify opportunities in which it may be beneficial to allow older, inefficient power plants to retire, while upgrading the capacity at new plants to reduce system costs and/or GHG emissions. The Commission has used RESOLVE as the optimal investment and operational model to inform long-term planning, select resources, and develop a least-cost portfolio to meet system targets. PG&E agrees, inclusion of natural gas upgrades as a candidate resource in a capacity expansion model, such as RESOLVE, with a set of consistent and pragmatic assumptions, is the best approach to providing insights into potential system benefits from natural gas capacity upgrades.

PG&E strongly emphasizes Staff's assertion that the economic analysis "found that the [natural gas] upgrades modeled were cost-effective based on estimated cost and potential... will be dependent on real market conditions as well as whether LSEs have flexibility to pursue the available upgrades."<sup>11/</sup>

Based on a review of the modelling assumptions, PG&E highlights the following assumptions that need further review and update:

1. *The baseline modeled by Staff is based on outdated aggregated LSE portfolios from the 2020 IRP filings.* The 2020 aggregated portfolios are outdated. Since the September 2020 LSE IRP filings, changes have occurred that substantially affect individual and aggregate LSE needs. First, the Power Charge Indifference Adjustment ("PCIA") Working Group 3 decision<sup>12/</sup> allocates renewables portfolio standard ("RPS") energy to departing load customers, fundamentally altering LSE bundled portfolio needs over the Integrated Resource Plan ("IRP") planning horizon.

---

<sup>11/</sup> Staff Paper, p. 16.

<sup>12/</sup> D.21-05-030, p. 3.

Second, the MTR procurement order directs Commission-jurisdictional LSEs to procure 11,500 MW of new resources.<sup>13/</sup> These, among other changes since the 2020 IRP portfolio filings, demonstrate that the LSE portfolios and portfolio needs have changed significantly. Use of a baseline more aligned with actual procurements expected to occur, in light of the changed LSE portfolios, may result in a different set of resources found to be cost-effective.

2. *The 22.5% PRM in RESOLVE used throughout the modeling horizon out to 2045 is not based on rigorous analysis or precedent.* The MTR procurement decision's Finding of Fact 1 provides that "[m]ore analysis is needed before revising the planning reserve margin for long-term planning in the IRP proceeding on a permanent basis."<sup>14/</sup> Analysis by Staff and the CEC indicates that enforcing a 22.5% planning reserve margin ("PRM") during the mid-term results in a LOLE lower than the industry standard 0.1 LOLE. While a 22.5% PRM was used to determine the 11,500 MW MTR procurement order, its use in the Staff's economic analysis is not based on justified precedent. Its use may result in the selection of more resources than cost-effective with natural gas upgrades falling within that category of resources. For example, in 2030 the 38 million metric ton ("MMT") Core RESOLVE results indicate that the 22.5% PRM is a binding constraint, and the Staff and other stakeholder's analysis show that the LOLE is below 0.1, therefore, 122 MW of natural gas upgrades (as shown to be selected in the high upgrade costs, low potential scenario) could be removed while still achieving an industry standard of 0.1 LOLE. It is unclear to what extent the PRM may be driving an overbuilt portfolio and selecting natural gas upgrades to meet a 22.5% PRM criteria in the Staff's modeling. An appropriate stakeholder developed PRM which is developed based on a LOLE analysis should be used to determine a cost-effective portfolio.

---

<sup>13/</sup> D.21-06-035, p. 43.

<sup>14/</sup> D.21-06-035, p. 86.

3. *The ELCCs in the PSP RESOLVE model are not aligned with the MTR incremental ELCCs released by the Commission—this is particularly the case for storage.* While the RESOLVE model results associated with that Staff’s natural gas upgrade analysis is not available for review, the storage resource effective load carrying capability (“ELCCs”) used for PRM accounting in the proposed preferred system plan (“PSP”) in 2024 and 2026 are 73% and 60%, respectively. This is compared to the MTR incremental ELCCs which are 91% and 69%, respectively.<sup>15/</sup> This indicates that the RESOLVE model used for the Staff’s economic analysis is undercounting the net qualifying capacity (“NQC”) contribution of storage resources, resulting in a potential underestimation of the cost-effectiveness of storage resources relative to their system benefits. The undercounting of the cost-effectiveness of storage resources has the potential to impact the selection of natural gas upgrades as a candidate resource. The natural gas upgrade scenarios modeled by the Staff results in natural gas upgrades selected primarily in place of storage resources when compared to the proposed PSP.

Considering the natural gas upgrades modeling limitation, it is unclear if natural gas upgrades are cost-effective from a system perspective. That said, PG&E does not oppose the Commission allowing natural gas upgrades as part of MTR procurement given its potential to mitigate the risks associated with bringing online an unprecedented (~30 GW) amount of nameplate capacity online in the next five years, as was discussed earlier in these comments.

PG&E is encouraged by the Staff’s long-term decarbonization perspective presented in the Staff Paper, including the discussion on next steps. In terms of next steps concerning natural gas analysis, PG&E recommends that the Commission collaborate with the CAISO and use a systematic approach for existing resource retention/retirement planning. Such analysis is long overdue and needs to start as soon as possible, especially for the resources located in disadvantaged communities. Otherwise, a piece-meal approach by the Commission to

---

<sup>15/</sup> Incremental ELCC Study for Mid-Term Reliability Procurement (Aug. 31, 2021), [https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltrp/20210831\\_irp\\_e3\\_astrape\\_incremental\\_elcc\\_study.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltrp/20210831_irp_e3_astrape_incremental_elcc_study.pdf) (accessed Oct. 21, 2021).

retention/retirement of natural gas facilities may lead to costly irreversible decisions. Detailed suggestions on reliability analysis which could be used to inform a systematic approach can be found in response to question two of PG&E's Opening Comments on the proposed PSP.<sup>16/</sup>

**Q2. Whether gas capacity upgrades at existing sites should be considered as eligible resources for the procurement requirements of D.21-06-035? If so, which of the various procurement process steps of D.21-06-035 would need to be amended, and how?**

PG&E does not oppose natural gas capacity upgrades at existing sites provided they are only optional procurements, not required procurements, for LSEs to meet procurement targets established by D.21-06-035. PG&E believes that natural gas capacity upgrades provide a reasonable “least regrets” insurance policy to maintaining system reliability given the concerns outlined in the Staff Paper, including the risk associated with bringing online an unprecedented amount of new capacity (~ 30 GW) over the next five years. In addition, the increasing number of natural gas plants procured through the CAISO's RMR mechanism demonstrate an alarming rate of early retirements due to an aging natural gas fleet and/or changing system economics. These items outlined in the Staff Paper represent a significant risk to system reliability if the trends continue their current course and trajectory. Accordingly, PG&E does not oppose natural gas capacity upgrades at existing sites as an *option only*—not a requirement—for LSEs to meet procurement targets established by D.21-06-035. (*emphasis added*) To allow the option for natural gas capacity upgrades at existing sites, PG&E believes various procurement processes would need to be amended, including:

- **Balancing Policy Goals and Customer Costs** – PG&E believes that the Commission should consider limits (in the form of costs or MW quantities) on the amount of natural gas capacity upgrades that can be used in meeting the procurement targets. In its Staff Paper, the Commission considered the impact of natural gas capacity upgrades from a cost perspective and GHG emissions perspective. While individual LSEs are best positioned to evaluate cost-

---

<sup>16/</sup> See *Opening Comments of Pacific Gas And Electric Company on Administrative Law Judge's Ruling Seeking Comments on the Proposed Preferred System Plan*, pp. 4-6. (September 27, 2021)

effectiveness within the context of their own procurement strategies, there needs to be a reasonable balance between clean energy goals and customer costs.

- **Determination of Incrementality** – PG&E believes that it is reasonable to allow natural gas capacity upgrades that result in incremental capacity and/or energy with the same level of natural gas input. Given that the natural gas capacity upgrades will be conducted at existing sites that are presumably on the IRP’s baseline list, PG&E believes that a methodology will need to be developed to demonstrate the amount of NQC that is incremental to the baseline list. For example, incremental NQC from combined heat and power (“CHP”) plants cannot be demonstrated in meeting the procurement targets given the existing resource adequacy counting rules that require 3-years of historical generation data. As a result, incremental NQC values will not be available until 2028 (assuming an online date of 2025). PG&E acknowledges the accelerated timelines under which the Commission is working; however, PG&E requests that the Commission issue a subsequent ruling for parties to submit proposals on a methodology to demonstrate incremental NQC. Parties to this proceeding have not been afforded sufficient time (only 5 business days) to develop thoughtful and feasible proposals for consideration by the Commission.
- **Minimum Contracting Terms** – PG&E believes the Commission should not require a minimum of 10-year commitment similar to the procurement of non-emitting resources as directed by D.21-06-035. LSEs should be given the flexibility to see what market participants can offer in terms of natural gas capacity upgrades and under what contracting terms. However, given the near-term reliability concerns, PG&E believes the procurement of natural gas capacity upgrades should be required to cover, at a minimum, the reliability needs for the years 2023-2026.

**Q3. Whether load serving entities that wish to contract with gas capacity upgrades at existing sites, if permitted by the Commission, should be required to demonstrate that they first attempted to procure non-emitting resources. If so, what should this demonstration consist of, and on what timeframe?**

Given that the CEC Analysis demonstrated that a portfolio containing the procurement of 11,500 MWs of preferred resources results in a lower LOLE relative to a portfolio containing procurement of only natural gas plants, PG&E believes that LSEs should first attempt to procure non-emitting resources, as directed by D.21-06-035, prior to pursuing natural gas capacity upgrades. In demonstrating that an LSE has made good faith efforts to pursue non-emitting resources, PG&E believes the demonstration could consist of:

- **Alignment with D.20-12-044** – In D.21-06-035, the Commission required LSEs to submit procurement information twice yearly, consistent with the requirements of D.20-12-044, to show progress towards the established capacity procurement targets. PG&E recommends that the Commission leverage the existing process for LSEs to demonstrate “good faith” efforts in first attempting to procure non-emitting resources.
- **Alignment with D.21-06-035** – In addition, PG&E understands the adopted penalty structure in D.21-06-035 to indicate that an LSE that fails to meet its 2023 or 2024 procurement target, presumably due to factors outside of its control, then that LSE has an opportunity to “catch up” and not be assessed penalties provided: (1) the resource is brought online by June 1, 2025 and (2) backstop procurement has not been triggered. Consistent with this penalty structure, if an LSE pursues natural gas capacity upgrades as its “catch up” option then the incremental capacity must be available by June 1, 2025 for the LSE not to be assessed penalties.

**Q4. If the Commission allows gas capacity upgrades at existing sites, whether the Commission should restrict or prohibit gas capacity upgrades in disadvantaged communities, as defined by the CalEnviroScreen tool, or impose some other/additional criteria.**

PG&E believes that natural gas capacity upgrades should be prohibited or restricted in disadvantaged communities *unless* the LSE can demonstrate either net reductions or, at a minimum, no net increase in GHG and criteria pollutant emissions. D.21-06-035 noted that having natural gas capacity available “still acts as an insurance policy during the operational transition to more renewables and energy storage on the system,”<sup>17/</sup> as the state makes progress towards its clean energy goals. In reviewing the CAISO’s 2021 NQC List and the CAISO’s Master Control Area Generating Capability List, PG&E found approximately 1,500 MWs of potential incremental capacity from existing natural gas plants.<sup>18/</sup> This is based on the difference between the NQC for the month of September and the Net Dependable Capacity (“NDC”). PG&E has provided a summary of the analysis in Table 1 below.

**Table 1 – Potential Incremental Capacity from Existing Natural Gas Plants**

Category	NDC (MW)	NQC for September (MW)	Difference (MW)
<b>Total Natural Gas Plants</b>	<b>30,726</b>	<b>29,178</b>	<b>1,548</b>
DACs	6,448	5,834	614
Non-DACs	5,897	5,352	545
Undetermined <sup>19/</sup>	2,393	2,004	389
QF/CHP	1,459	791	668

Table 1 above highlights that a large portion of the potential incremental capacity is located within disadvantaged communities, as defined by the CalEnviroScreen tool. Net reductions or, at a minimum, no net increase in GHG and criteria pollutant emissions for procurement in disadvantaged communities are a reasonable means to balance ensuring near-

<sup>17/</sup> D.21-06-035, p. 42.

<sup>18/</sup> See CAISO’s 2021 NQC List at <http://www.caiso.com/Documents/NetQualifyingCapacityList-2021.xlsx> (accessed Oct. 20, 2021), See also CAISO’s Master Control Area Generating Capability List at <http://oasis.caiso.com/mrioasis> (accessed Oct. 20, 2021). PG&E’s analysis on potential incremental capacity is solely based on the assumption that existing natural gas plants will not require re-entering the interconnection queue.

<sup>19/</sup> Based on publicly available data, PG&E is unable to determine the categorization of these resources.

term system reliability while remaining committed to not increasing overall emissions across the state, including within disadvantaged communities.

#### IV. ADDITIONAL RELATED COMMENTS

PG&E provides the following additional comments for the Commission's consideration:

- **Use of Zero-Carbon Fuels:** PG&E supports the use of zero-carbon fuels like green hydrogen to the greatest extent possible and shares similar concerns as outlined in the Staff Paper regarding mandates for zero-carbon fuels. PG&E supports the Commission's recommendation to incorporate additional analysis on the cost, potential and use cases for zero-carbon fuels like green hydrogen in decarbonizing California's economy to create a holistic plan before imposing procurement mandates. PG&E also points to its previous comments on renewable hydrogen filed on September 27, 2021 and October 11, 2021 in this proceeding.<sup>20/</sup>
- **Additional Details on Natural Gas Capacity Upgrades:** To assist LSEs, PG&E requests the CEC provide details on the feasibility assessment for the estimates of additional capacity cited in the Staff Paper and provided at the August 30, 2021 CEC business meeting. This will allow LSEs the ability to quickly contact these suppliers should the Commission allow natural gas capacity upgrades as an option.

#### V. CONCLUSION

PG&E respectfully requests that the Commission consider the recommendations presented in these Opening Comments toward the Commission's forthcoming proposed decision in this proceeding.

---

<sup>20/</sup> See *Opening Comments of Pacific Gas and Electric Company on Administrative Law Judge's Ruling Seeking Comments on the Proposed Preferred System Plan*, pp. 24-25. (September 27, 2021); and, see *Reply Comments Of Pacific Gas and Electric Company on Administrative Law Judge's Ruling Seeking Comments on the Proposed Preferred System Plan*, pp. 12-14. (October 1, 2021)



Respectfully Submitted,

DANIEL S. HASHIMI

By: /s/ Daniel S. Hashimi  
DANIEL S. HASHIMI

Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, CA 94105  
Telephone: (818) 388-1711  
Facsimile: (415) 973-5520  
E-Mail: Daniel.Hashimi@pge.com

Attorney for  
PACIFIC GAS AND ELECTRIC COMPANY

Dated: October 21, 2021