DOCKETED	
Docket Number:	23-SB-100
Project Title:	SB 100 Joint Agency Report
TN #:	256103
Document Title:	PG&E Comments RE SB 100 NEBs Workshop
Description:	N/A
Filer:	System
Organization:	PG&E/Josh Harmon
Submitter Role:	Public
Submission Date:	4/30/2024 4:38:08 PM
Docketed Date:	4/30/2024

Comment Received From: Josh Harmon
Submitted On: 4/30/2024
Docket Number: 23-SB-100

PG&E Comments RE SB 100 NEBs Workshop

Additional submitted attachment is included below.

Pacific Gas and Electric Company

Josh Harmon
CEC Liaison
State Agency Relations

1415 L Street, Suite 280
Sacramento, CA 95814
(628) 777-4138
Joshua.Harmon2@pge.com

April 30, 2024

California Energy Commission
Docket Number 23-SB-100
715 P Street
Sacramento, CA 95814

RE: 2025 Senate Bill 100 Report Non-Energy Benefits Workshop

Pacific Gas and Electric Company (PG&E) appreciates the opportunity to comment on the California Energy Commission's (CEC) 2025 Senate Bill 100 Report Non-Energy Benefits/Non-Energy Impacts Workshop held on April 15, 2024.

PG&E appreciates the Joint Agencies' focus and attention on analyzing the full suite of potential costs and benefits of decarbonizing California's electric supply and acknowledges the importance of non-energy impact (NEI) evaluation in energy resource and climate planning. Below we highlight key points, along with supporting detail, for consideration as the Joint Agencies explore this important issue.

Statutory mandates must be balanced with safety, affordability, and reliability.

As California rapidly advances on its decarbonization pathway it is imperative to develop transparent metrics to assess the cost-effectiveness of a broad and diverse portfolio of strategies and tactics to decarbonize all sectors of the economy. NEI evaluation adds more information to the growing body of research. However, PG&E would like to underscore the CPUC's position that statutory mandates must be considered in tandem with safety, affordability, and reliability.[1]

Non-Energy Benefits (NEBs) should be evaluated carefully and with an eye toward ratepayer indifference.

To comply with the Public Utilities Code Section 454.53(b)(2), which requires the Joint Agencies to take actions to "*prevent unreasonable impacts to electricity, gas, and water customer rates and bills[…], taking into full consideration the economic and environmental costs and benefits of renewable energy and zero-carbon resources*," emphasis should be placed on benefits that provide value to all ratepayers. The evaluation of NEIs should be considered with an understanding of both the uncertainty of the estimated values and the potential for unintended consequences if the analysis is used to skew the cost-

[1] CPUC Presentation for 2025 Senate Bill 100 Report Non-Energy Benefits Workshop, Zoom recording 1:04:42

effectiveness of a particular resource, as these consequences could create upward rate pressure and disincentivize customers from choosing to electrify end uses.

It is essential to keep avoided cost valuation methodologies separate from other categories of benefits to ensure that decision-makers can clearly delineate between utility costs that may be avoided and therefore benefit all customers via lower bills versus other categories of benefits that may be resource and technology specific and could result in one segment of ratepayers benefiting at the expense of others. As such, NEBs should be applied evenly to supply and demand resource types to level the playing field between grid-scale and distributed resources to enable the Commission's goals to be met at least cost. As NRDC stated in its workshop presentation, while non-energy impacts may be cost-effective from a global societal point of view, they will nevertheless lead to higher bills if funded through the electric rate base.[2]

The Joint Agencies should consider funding for NEBs through alternative sources that maintain customer affordability.

PG&E believes that in an all-other-things-equal situation, NEBs can play a vital role in program design. For example, where two or more programs can deliver the same ratepayer value for a similar investment, NEBs can provide critical guidance on the better course of action. However, when deciding on where to invest scarce resources, programmatic procurement to capture these types of participant-specific NEBs should not be sought from nonparticipating utility customers—rather, to echo NRDC, funding to capture these benefits should be through taxes or other revenue sources in order to maintain affordability and ensure a fair and progressive transition to a clean economy.[3]

There should be consistent treatment of NEB/NEI values across the Joint Agencies.

Efforts by the CEC to assess NEIs should either coordinate with, or at least not duplicate, efforts at the CPUC. PG&E would like to highlight that some level of work on assessing NEBs is underway in both the Energy Savings Assistance (ESA)[4] and Energy Efficiency (EE)[5] program areas.

The Social Cost of Carbon should be used in NEI analysis cautiously.

The Social Cost of Carbon (SCC) constitutes an uncertain estimate of the national or global damages from climate change. As such, quantified monetary benefits using the SCC are not limited to the California ratepayers who will largely be paying for the investments needed to meet California's SB100 targets. This asymmetry between costs and benefits is important to note as using the Social Cost of Carbon as a measure to choose between resource types or set planning targets could inflate budgets without meaningfully reducing emissions or providing benefits to the electric system, possibly resulting in upward pressure on customer rates. The CPUC's SCT Impact Analysis, which includes the SCC as a component, acknowledges this risk clearly in its key takeaways, "…any increased benefits shown by an

[2] NRDC Presentation for 2025 Senate Bill 100 Report Non-Energy Benefits Workshop, Zoom recording 2:57:02
[3] NRDC Presentation for 2025 Senate Bill 100 Report Non-Energy Benefits Workshop, Slide 7.
[4] D.21-06-015, OP 87 resulted in a joint IOU advice filing dated March 23, 2023 (PG&E AL 6893-E, et al).
[5] D.23-06-055, Ordering Paragraphs 17, 18 and 19.

SCT relative to a TRC are societal benefits, rather than ratepayer benefits, and therefore basing cost effectiveness on an SCT could cause an increase to rates."[6] Implicitly, the SB100 modeling framework assumes that California will meet its SB100 GHG reduction targets, therefore monetizing those benefits with the SCC, which is both highly uncertain and subject to wide swings in median values, is of limited incremental value. Rather than trying to answer the question: "what are the benefits of achieving SB100 as measured by the SCC?", which California has already judged as significant by passing the legislation, the SB100 analysis instead should focus on: "what is the least cost pathway to achieving SB100?"

Gas plant retirement methodologies should align with those in the CPUC's Integrated Resource Plan (IRP).

The CPUC's IRP is required to analyze local air quality impacts and develop solutions to mitigate these impacts with an early emphasis on DACs.[7] As part of this ongoing work, the most recent IRP has developed a "high gas retirement" scenario, which models the retirement of approximately 12 GW of thermal power plants above and beyond the roughly 4 GW that are assumed economic retirements in the preferred system plan (PSP).[8] As part of this scenario, the CPUC developed a scoring criteria to prioritize retirements, which includes indicators for proximity to DACs. The CEC's analysis of air quality co-benefits and the CEC's own "Combustion Resource Retirement" scenario should leverage the work the CPUC has already done to rank and prioritize gas retirements.

Air quality impact research findings may be useful for regional impact analysis, but local impacts would require standalone efforts as downscaling has inherent limitations.

As acknowledged on the dais and by state agency representatives, PG&E recognizes the challenge of modeling localized air quality co-benefits and attributing these benefits to programs or mitigations.[9] The SB100 modeling framework, which focuses on statewide pathways to achieving electric sector targets while maintaining systemwide reliability and affordability, is not designed to perform detailed studies of particular areas to identify specific solutions to reduce or eliminate emissions sources.

As such, the CEC should take care to present any air quality co-benefits as relative indicators across the scenarios it studies as opposed to specific monetized benefits of a particular action. If the CEC is interested in designing more targeted solutions while incorporating air quality impacts the CEC should partner with the CPUC and CAISO to craft specific studies of local areas where 1) natural gas retirements have been identified and 2) the CPUC and CAISO are studying alternatives to natural gas generation in that area, such as local renewable generation and storage or transmission. It is critical to involve the Joint Agencies in this modeling to fully understand the operational impacts of relying less on natural gas generation, such as impacts to reliability and the feasibility of locating preferred resources in that area.

--

[6] SCT Impact Analysis at p. 31

[7] Public Utilities Code Section 454.52(a)(1)(H)

[8] CPUC D.24-02-047 Decision Adopting 2023 Preferred System Plan and Related Matters, And Addressing Two Petitions For Modification, at p. 77

[9] CEC Presentation - 2025 Senate Bill (SB) 100 Non-Energy Impacts Workshop, slides 32-34

PG&E appreciates the opportunity to comment on the CEC's 2025 Senate Bill 100 Non-Energy Benefits Workshop and looks forward to continuing to collaborate with the CEC. Please reach out to me if you have any questions.

Sincerely,

Josh Harmon
State Agency Relations