

DOCKETED	
Docket Number:	24-OIIP-03
Project Title:	Informational Proceeding on Non-Energy Benefits and Social Costs
TN #:	270414
Document Title:	May 18, 2026, Staff Webinar on Integrating NEI Metrics in Supply Modeling
Description:	N/A
Filer:	System
Organization:	The Energy Coalition
Submitter Role:	Public
Submission Date:	6/1/2026 4:43:26 PM
Docketed Date:	6/1/2026

*Comment Received From: The Energy Coalition
Submitted On: 6/1/2026
Docket Number: 24-OIIP-03*

**COMMENTS OF THE ENERGY COALITION On the May 18, 2026,
Staff Webinar on Integrating NEI Metrics in Supply Modeling**

Additional submitted attachment is included below.

California Energy Commission
715 P Street
Sacramento, CA 95814

June 1, 2026

COMMENTS OF THE ENERGY COALITION

On the May 18, 2026, Staff Webinar on Integrating NEI Metrics in Supply Modeling

I. Introduction

The Energy Coalition (TEC) submits these comments on the California Energy Commission's May 18, 2026, staff webinar regarding the integration of Non-Energy Impact (NEI) metrics in supply modeling. TEC supports the proceeding and the framework presented by Commission staff and PSE Healthy Energy. The substance of the workshop, and the transparency of the public process, reflect a significant investment of analytical effort over the past two years.

TEC has worked with California communities on energy efficiency, demand-side programs, and community-scale energy solutions for nearly fifty years. Across that period, the health, resilience, affordability, and workforce benefits this framework now seeks to incorporate have remained largely outside formal planning, or have been valued asymmetrically. The Commission's work in this proceeding begins to correct that.

II. The Framework Is Meaningful Progress

The five integration approaches and approximately twenty metrics described at the workshop span health, resilience, household cost, water, and workforce. The scope encompasses the categories in which most of the practical value of demand-side and community-scale investment is realized and does so without committing the framework prematurely to a single methodological path.

Several design choices in the framework warrant particular note. The integration of the Energy Equity Indicators with the NEI methodology places equity within the analytical architecture rather than alongside it. The range of integration approaches presented permits the use of constraint-based and distributional methods where full monetization is not feasible. Staff and PSE Healthy Energy also acknowledged the limitations of bulk-system modeling and the underdeveloped state of demand-side integration methods. That acknowledgment is appropriate to the scope of the work ahead.

Vice Chair Gunda's framing throughout the workshop, that "all impacts are local," identifies the central methodological challenge this proceeding addresses. The observations below are offered in support of that framing.

III. Observations for the Scenario Testing Phase

A. The demand-side gap is where the most consequential methodological work remains.

The slides and workshop discussion consistently identified demand-side resource integration as the least mature element of the framework. TEC shares that assessment. Demand-side resources are where the NEI categories the framework priorities are concentrated. Building electrification produces health benefits at the community scale. DER adoption produces resilience benefits at the household scale. Efficiency produces affordability benefits at the customer scale. Workforce impacts from demand-side programs are distributed across local economies in ways the regional workforce metric is designed to capture.

California's Regional Energy Networks (RENs) administer a substantial portion of the state's demand-side program portfolio and have generated much of the NEI value the framework seeks to capture, which is applicable to SB 350 and SB 100 goals. REN program data, customer-level outcomes, jurisdictional implementation experience, and equity program participation data are available as inputs to scenario testing. The pre-defined demand scenario approach described in the workshop slides offers a practical path to incorporate this data into the analysis without requiring it to be evaluated through the capacity expansion model more directly. TEC further encourages the Commission to consider potential methods of treating demand-side and community-scale resources as portfolio candidates, rather than as load modifiers subtracted from forecast demand before the model is run. This reflects the direction of TEC's recent work on what we have termed "loading lanes,"¹ a reframing of California's loading order approach as the parallel deployment of efficiency, solar, storage, and electrification, with associated NEIs evaluated as part of resource value.

B. Societal benefits and distribution-grid benefits are connected. A theme running through TEC's policy and technical work, including engagement with the GridWise Architecture Council and participation in the International Energy Agency's Global Observatory on Peer-to-Peer, Community Self-Consumption, and Transactive Energy Models (GO-P2P), is that societal benefits and distribution-grid benefits arise from the same set of program activities. Distributed generation, storage, demand flexibility, and building electrification produce health, air-quality, resilience, affordability, and grid-services value simultaneously and at every scale, from the household through the community to the distribution system. Evaluating these benefits as separate streams in isolation, or assigning each to a single scale, consistently undercounts what these resources deliver. The methods and approaches presented at the workshop support this holistic approach that stakeholders have advocated for during the proceeding.

TEC's work on the Bassett-Avocado Heights Advanced Energy Community (BAAEC), an EPIC-funded CEC project, examined this connection across the full scope of community-scale intervention. BAAEC delivered an integrated package of low-income single-family home upgrades which included solar, storage, electrification, energy efficiency and weatherization, and customer education through an "Advanced Homes" element. This also included a community solar

¹ Costa, M., Federico, F., and Bugarin, G., "From Loading Order to Loading Lanes: Rethinking the Energy Transition and Unlocking Smart Local Energy Markets for Communities of Concern," in *Proc. 2024 ACEEE Summer Study on Energy Efficiency in Buildings*, 2024, https://www.aceee.org/sites/default/files/proceedings/ssb24/assets/attachments/20240722163133395_1bd5580f-5323-4f22-8c77-8884737fe8df.pdf

installation for low-income multifamily households including renters, in a San Gabriel Valley disadvantaged community where the typical participant exhibits energy limiting behavior².

Advanced Homes participants experienced an average 35 percent reduction in combined energy bills, while delivering strategies capable of delivering coincident peak reductions to the utility through battery and programmable load flexibility. Community Solar participants experienced a 20 percent bill reduction, and because this generation project served nearby homes, line losses were significantly reduced. Project monitoring also surfaced distribution-system findings outside the scope of conventional cost-effectiveness review, including household service voltages persistently below ANSI standards, a condition that prosumer inverter-based resources could directly address through reactive power and voltage support. When societal value and grid-service value are evaluated as separate analytical streams, demand-side resources are systematically undervalued. Where measures are evaluated individually, the synergies driving realized household outcomes are not captured. As scenario testing advances, TEC encourages the Commission to consider NEI framework outputs alongside parallel work on locational and distribution-grid value.

C. The CEC's methodological transparency should be carried across agencies. In opening remarks, Vice Chair Gunda noted the importance of working collaboratively with other agencies and reflecting the spirit of NEI work across CEC processes. TEC supports that orientation. The CEC, the California Public Utilities Commission, the California Air Resources Board, and the California Independent System Operator each conduct analytical work that touches the resources, costs, and benefits this framework addresses. These parallel workstreams use different methodologies, different cost-effectiveness conventions, and different assumptions about what constitutes a benefit and what does not. Distributed and demand-side resources frequently bear the cost of that asymmetry, as the same resource may be valued in one venue and discounted or excluded in another, with no consistent treatment of its societal impacts.

The May 18 workshop made the CEC's metrics, integration approaches, monetization assumptions, and modeling limitations publicly available in a single, accessible record. That level of transparency is a model for the urgently needed methodological alignment across agencies that this framework requires. TEC encourages the Commission to maintain that approach by releasing a draft summary report and continuing this transparency through the scenario testing phase, including transparent disclosure of scenario assumptions, sensitivity ranges, monetization choices, and methodological limitations as testing proceeds.

D. Constraint-based integration and scenario breadth are the right near-term emphases. The framework presents five integration approaches with different methodological demands and different analytical strengths. Among these, constraint-based integration offers a particularly useful near-term path. Constraints provide a means of exploring NEI-informed resource portfolios that does not require complete monetization of every category, which matters for NEIs such as resilience, distributional equity, and community-scale outcomes that do not lend themselves to

² Energy limiting behavior describes how underserved communities use energy differently to save on electric bills (Ref: S. Cong, D. Nock, Y. L. Qiu, and B. Xing, "Unveiling hidden energy poverty using the energy equity gap," Nat. Commun., vol. 13, no. 2456, 2022, <https://doi.org/10.1038/s41467-022-30146-5>)

single-dollar valuation. Constraint-based methods also align with how California's policy goals are actually structured. Rather than asking whether a given NEI is large enough to alter portfolio selection at a given monetization, constraints ask what resource mix is required to achieve a defined NEI outcome and at what supply-side cost. This framing is consistent with statutory greenhouse gas targets, equity mandates under SB 535 and AB 1550, and the SB 100 zero-carbon trajectory, each of which establishes a required outcome and asks the system to deliver it at lowest cost.

The framework's value will emerge primarily from running many scenarios across the five integration approaches, exposing patterns and trade-offs that no single optimized scenario can reveal. TEC encourages the Commission to prioritize iteration and breadth over front-loaded refinement of any single methodology, and to publish intermediate scenario results as testing progresses rather than waiting for a single comprehensive output. Visibility into the framework's behavior under varied assumptions will build stakeholder confidence and surface methodological refinements that closed development cannot.

IV. Continued Engagement

TEC reaffirms its support for this proceeding and the trajectory set out for scenario testing through late Fall 2026 and the anticipated Q1 2027 workshop. TEC is available to contribute analytical perspectives on demand-side methodology, to share findings from its prior work on community-scale prosumer networks and societal benefit quantification, and to support the Commission's consideration of how NEI methodologies connect to parallel work on distribution-grid value and grid services.

TEC thanks Vice Chair Gunda, Commissioner Gallardo, Energy Assessments Division staff, PSE Healthy Energy, and fellow stakeholders for the constructive process reflected throughout the May 18 workshop and looks forward to continued participation in this proceeding.

Respectfully submitted,

/s/ Marc Costa

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June 1, 2026