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COMMENTS OF THE LOCAL GOVERNMENT SUSTAINABLE ENERGY COALITION ON ADMINISTRATIVE LAW JUDGE'S RULING SEEKING COMMENTS ON THIRD PARTY AND OTHER ISSUES

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SUSTAINABLE ENERGY COALITION

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About LGSEC

The Local Government Sustainable Energy Coalition (LGSEC) represents ten cities, ten Counties, four Council/Association of Governments, four Regional Agencies, two Community Choice Aggregators, one Academia, and seven Nonprofits. Collectively, LGSEC member represent up to 65% of California's population and nearly two-thirds of California's electrical energy demand. LGSEC members serve as administrators, designers and lead implementers of a host of energy efficiency, demand response, building decarbonization, transportation electrification and other energy management programs.

Local governments have authority over development, land use, permitting, infrastructure, local codes and programs, municipal programs and facilities. Local governments are the first line of defense and the providers of last resort when it comes to disaster preparedness and emergency response. Local governments need greater capacity, information and resources to effectively address our changing climate.[1]

Database Tools

71. *What are the benefits of creating a governance committee comprised of program administrator and Commission staff to jointly determine the annual development and update priorities for energy efficiency reporting and data system, including CEDARS and CET? How can such a committee make the process transparent to stakeholders?*

[1] LGSEC 2023-2023 Policy Platform. https://lgsec.org/wp-content/uploads/2022/04/LGSEC-2022-2023-Policy-Platform.pdf

Socializing data requirements amongst PAs and Commission staff would be a useful way to identify priorities that reflect policy imperatives and practical challenges as needs and situations evolve. However, serving on an ongoing governance committee is challenging for local government staff who have immediate, day-to-day responsibilities and are not funded to participate in State regulatory proceedings. would place new burdens on the affected parties.

This responsibility might be better undertaken by an entity such as the California Technical Forum (CalTF). CalTF is well positioned to undertake a reporting and data system advisory role. For example, it maintains the California electronic Technical Reference Manual (eTRM), an online application that serves as the repository for statewide deemed measures. There is potential for CalTF to advance the technical workflows for all measure types, including those encompassing all IDSM interventions. Within the context of the EE portfolio, the eTRM would contain a software integration into CEDARs and vice versa. Enabling CalTF to serve as an advisory or implementation body would create a pathway to sync data flows, systems, and governance structures in a way that effectively streamlines the task.

72. *Should all of the program administrators, or only the investor-owned utilities (IOUs), be expected to co-fund the reporting systems (and why)? If the reporting systems are funded by the four IOUs, how can the non-IOU program administrators be appropriately represented in the governance process?*

All PAs utilize CEDARS and related reporting systems, and therefore should be represented in the governance process in some fashion, or be represented by a neutral third party, such as Cal TF. If a governance committee is formed, there should be opportunity for representation by all PA types (IOUs, CCA, and Regional Energy Networks).

As previously discussed, significant time and resources are needed to meaningfully participate in data discussions. Any governance process should utilize existing meetings when possible and be mindful of constraints on small and newly approved PAs. The process should provide compensation to participants in the governance process for their time and expenses.

73. *The CEDARS database accepts, processes, and stores official energy savings and cost claims upon which the program administrators are assessed for regulatory compliance. How should the Commission maintain data integrity and oversight, while enabling the program administrators to co-fund and co-manage the CEDARS and CET tools?*

Commission staff should retain final approval over enhancements before they are implemented as a means to maintain data integrity and consistency with reporting requirements. This imperative should be incorporated into the adopted governance process.

74. *How should the Commission ensure transparency to stakeholders about CEDARS/CET and other resource development and maintenance? What role should stakeholders play in the software development and update process?*

All stakeholders should be able to recommend features and enhancements to CEDARS/CET through an annual or every other year process, similar to the way in which the Database for Energy Efficiency Resources (DEER) and the Avoided Cost Calculator (ACC) are managed. PAs, in particular, should be invited to help prioritize improvements based on the most pressing user needs.

Stakeholders should be able to beta test the platforms before they go live under a transparent, reliable schedule. Ideally, new features and specifications would be released in the staging site 1 calendar quarter ahead of release in production. This would provide PAs with

sufficient time to assess the implications to their programs and communicate changes to program teams and implementers.

Existing tools and resources to which PAs have access, such as CEDARS and Basecamp, should be leveraged to increase data resource development transparency. A new CEDARS tab, "Development and Maintenance," could detail upcoming development items and scheduled maintenance, as well as timelines for implementation, testing, and deployment. Email notifications when items are added or revised would help PAs monitor activity potentially impacting their programs.

The eTRM itself is an effective tool for providing users real time updates through voluntary measure-level subscription features and should be further utilized, or tailored for program administrator and Commission coordination.[2] All reporting meetings should be added to the calendar feature. This would increase transparency related to subgroups and ensure that PAs who want to participate can choose to do so.

PAs have found it difficult to monitor the many subgroups and ensure appropriate staff are in attendance. The Basecamp calendar should include a meeting link so any interested stakeholder can decide to attend. Posts in Basecamp should continue to be leveraged to communicate with PAs between scheduled PCG sessions.

75. *What types of reports or notifications, such as an annual CEDARS/CET development plan, would enable stakeholders to clearly understand how resources, such as data specifications and other tools, are changing?*

As alluded to previously, potential changes to data specifications should be calendared, with notifications issued, and opportunities for stakeholder comment. An Annual CEDARS/CET

[2] Public and municipal utilities also have unique needs as CalTF members. An open, flexible strategy should be pursued to accommodate all parties affected.

development plan would be a useful resource for communicating changes to data specifications and other tools. This document should be posted to CEDARS and updated regularly with revisions documented in a change log. PAs and stakeholders should be updated when a new version of this document is available; revisions should be discussed at the Reporting PCG meeting. Additionally, changes should include an effective date when the PA must begin reflecting it in their reporting. This document could be housed in the new "Development and Maintenance" CEDARS tab as proposed in response to question 74.

76. *What other technical resources would stakeholders like to see from the CEDARS/CET governance committee, if one is created?*

Predictability, reliability, and discipline is essential in terms of schedules, cadence, and any potential exceptions to expected patterns. Layering of additional stress on stakeholders as a result of stop-start or unpredictable engagement requirements should be avoided.

A comprehensive CEDARS user manual should be produced, reflecting the following features:

- Data dictionaries with data source and field definitions.
- Validation rules defined in plain language.
- Warning and error message definitions with troubleshooting guidance.
- Energy savings calculation formulas.
- Digitization of measure scripts akin to the Department of Energy / National Renewable Energy Laboratory Building Component Library[3] (BCL).

[3] https://bcl.nrel.gov/

- Integration of relevant aspects of the California Energy Commission's (CEC) MIDAS and the pending CalFUSE proposal to accommodate CET runs, measure permutations, and enable rate comparisons in a High DER future.[4]

Existing metadata, validation and warning rules can be difficult to interpret and incomplete. More user-friendly and comprehensive guidance documents are needed. The CET User Guide provides a good starting point and should be expanded to other modules such as Monthly Reports, Quarterly Claims, Budget & Application Filings, and the like. Such enhancements to eTRM and CEDARS should be vetted by the adopted governance body and evaluated for cost effectiveness, feasibility, and applicability to stakeholders.

CATALENA Project

Background

LGSEC has been an active party in R.13-11-005 since its inception, consistently maintaining that stakeholder access to disaggregated data is vital to 1) develop performance-based program designs, 2) comprehensively and effectively monitor program outcomes in real- or near real-time, and 3) implement performance-based, continuous improvements and adjustments to programs as needed to attain goals.[5]

[4] Currently various building energy modeling softwares and the OpenEI utility rate database have API or scripted connections to facilitate customer-focused impacts of IDSM interventions.

[5] For example, the Coalition submitted comments on the CATALENA project in response to the March 18, 2015 Ruling of Administrative Law Judge Edmister, regarding the Phase II Workshop 3. This workshop focused on Statewide Core and Third Party Programs for 2016 and beyond, as directed by the Assigned Commissioner and Administrative Law Judge's Ruling and Scoping Memorandum regarding implementation of the energy efficiency "Rolling Portfolio."

The questions posed in this proceeding related to data access and the CATALENA tool underscore the continuing need for additional local government capacity and resources to develop climate action, local hazard mitigation, resilience, and emergency response plans.

While the Commission has generally been supportive of LGSEC's call for comprehensive and transparent data access, the goal of making critically needed information available to suitable stakeholders has not yet been obtained.[6] This is in part because of IOU resistance to sharing data with other parties under the cloak of the need to safeguard confidentiality. This utility tactic extends to balking at providing necessary information to CCAs, non-IOU PAs, and other entities which cannot effectively do their jobs without proper access. Lack of adequate data creates a substantial barrier to local government efforts to prepare greenhouse gas emission inventories.

LGSEC well understands the need for privacy protections, but this imperative should not be used by the IOUs to hobble efforts by other energy efficiency providers to do their jobs.

Energy Division staff, under the directive of Senate Bill 1339, Public Utility Code Sections 8370-8372, and R.19-09-009, have engaged LGSEC in identifying data barriers that undermine local governments' effectiveness. LGSEC has also collaborated with the CEC on data access issues; LGs have historically been the tip of the spear in enacting local ordinances and policies related to information sharing, energy and carbon benchmarking, inventories, electrification, and decarbonization.

Regulatory history suggests that determined innovation and creativity must be deployed to reconcile legitimate privacy concerns with the data-driven need to attain decarbonization

[6] We note that the California Energy Commission, in the Draft California Existing Buildings Energy Efficiency Action Plan (March 2015), highlights the importance of energy usage data to the State's green building efficiency goals and identifies a number of additional actions that will be required.

goals. For example, in August 2016, the Commission adopted D.16-08-019, providing guidance on rolling portfolio elements.[7] In that proceeding, LGSEC proposed to serve as statewide administrator for Local Government Programs (LGPs), which were then managed by individual IOUs. In advancing its recommendation, LGSEC identified a number of challenges that LGPs faced at the time, including inconsistent data access. To address this barrier, LGSEC recommended the development of a statewide energy usage database akin to The University of California at Los Angeles' (UCLA's) Energy Atlas (for Los Angeles County).[8]

Bay Area Regional Energy Network (BayREN) and SoCalREN supported the concept, advancing the idea that it should be implemented by a local government, as opposed to an IOU. LGSEC proposed a budget be allocated to the Local Government Commission (LGC) to coordinate the effort.

In Decision 18-05-041, the Commission ordered the IOUs to select a statewide lead to oversee deployment of the Energy Atlas, and to solicit a third party implementer. Yet to date, no request-for-proposal has been issued. In the meantime, the Energy Atlas, managed by the University of California, has extended to the Bay Area, leveraging investments from the CEC and others, but it does not fulfill all of the needs discussed herein, largely due to outdated and poorly-supported data aggregation rules and a lack of state funding.

Nearly a decade after LGSEC's initial regulatory engagement with data access, critical issues remain largely unresolved. What LGSEC stated in 2015 remains the same today: "the

[7] D.18-05-041 May 31, 2018. Page 4
[8] D.18-05-041 May 31, 2018. Page 116

current [data] system balkanizes non-IOU PAs and creates a substantive, debilitating (yet curable) dilemma that affects the use of ratepayer funds."[9]

To address these long lingering challenges, CATALENA should be expanded beyond EE use cases and tied to other proceedings. CATALENA should not take over the role of creating or analyzing the data, but it should evolve as a tool to integrate information on demand flexibility, microgrids, Public Safety Power Shutoffs (PSPS), and the like to help stakeholders understand how demand side consumption trends could benefit supply side issues.

The tool should be adopted by resolution, in the same fashion as the avoided cost calculator and DEER/eTRM. In that way, CATALENA would have access to the necessary data and inputs generally beneficial to decarbonization efforts, including integrated and distributed resource planning.

82. *How should the IOUs be required to implement the disaggregated demand data as defined in California Code of Regulation. Title 20, § 1353 - Disaggregated Demand Data, in the statewide tool ordered in Ordering Paragraph 32 of D.18-05-041?*

R.22-07-005 to Advance Demand Flexibility Through Rates, based largely on "*Advanced Strategies for Demand Flexibility Management and Customer DER Compensation,"* [10] focuses on developing a rate reform portfolio that reflects locational and temporal values of energy. CATALENA could serve as a helpful tool to visualize snapshots (e.g., annual, quarterly, monthly, or depending on data transfer frequency) of locational needs for EE, DF, and DERs.[11]

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[9] COMMENTS OF THE LOCAL GOVERNMENT SUSTAINABLE ENERGY COALITION ON ROLLING PORTFOLIO PHASE II, WORKSHOP. April 13, 2015. 3https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M151/K169/151169614.PDF

[10] https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/demand-response/demand-response-workshops/advanced-der---demand-flexibility-management/ed-white-paper---advanced-strategies-for-demand-flexibility-management.pdf

[11] The UCLA Energy Atlas contains aggregated monthly and annual data. Modifications to backend database architecture and storage media would be required to manage "interval meter data" (as included within Title 20 §

Absent access to such a tool, stakeholders will have no way to identify where supplyside scarcities exist. Integrated Capacity Analysis (ICA) maps do not share much information, and do not tie to metrics on energy use intensity averages. Without a way to comprehensively visualize these elements, stakeholders will be flying blind in terms of customer targeting, or the ability to forecast what demand-side management (DSM) strategies could benefit the grid or themselves.

In D.18-05-041 OP32, the Commission specified that the IOUs must select among themselves a lead to *oversee* statewide deployment of the Energy Atlas. However, the Commission is also authorized to supervise the procurement process and implementation of Energy Atlas statewide deployment and ongoing management.

Non-IOU PAs, as well as local governments, have a defined need for the tool and associated data. Given the IOUs' abject failure to produce a timely solicitation, as ordered by the Commission, LGSEC recommends that the CPUC immediately exercise its authority to issue a request-for-proposal (RFP) and manage development and implementation of the tool. If the Commission prefers to delegate this responsibility, it should collaborate with LGC to undertake the task, as originally proposed by LGSEC.

The CPUC has an opportunity to improve its understanding of the impacts on Environmental and Social Justice (ESJ) communities, as stipulated in the ESJ Action Plan 2.0[12] section on Tracking and Measuring, by enhancing CATALENA's ability to reflect socioeconomic data. UCLA has already incorporated[13] CalEnviroScreen 4.0, building attributes,

1353 a (3), and which exists for both electricity and natural gas customers) due to the sheer volume of such data. Also included in § 1353 (b) is geospatial data. The CEC has investigated use of standardized nomenclature as a means to adopt the U.S. Department of Energy's Unique Building Identification (UBID) by assigning alphanumeric, human-readable data that would allow researchers to connect meters to buildings. LGSEC recommends that the CATALENA implementer work with stakeholders to produce UBIDs, and contribute these to the IOUs for streamlined EM&V activities and *ex ante / ex post* analyses.

[12] https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M465/K846/465846599.pdf

[13] https://www.energyatlas.ucla.edu/profiles

and locational data in the Energy Atlas. Associated tools built from the Atlas also include the solar potential[14] of buildings and parking areas, ICA maps, and the estimated number of renters and owners. In this context, the CPUC should allocate additional resources to enable CATALENA to accommodate ESJ Action Plan data needs, as well as coordinate with CalFUSE to integrate electrification and high DER analyses being conducted in other proceedings.

The Commission should act in this proceeding to assign responsibility for a CATALENA solicitation, preferable to LGC, with an authorized budget, date certain for its issuance, award, and completion. Likewise, LGSEC urges the Commission to modernize its idea of the tool as a means to accelerate DER adoption and effectively monitor ESJ outcomes.

83. *Describe how the winning bidder of the statewide tool should make disaggregated demand data accessible to qualifying users and use cases as defined in D.14-05-016?*

In alignment with the CalFUSE proposal, the information's locational aspects must be clear. All stakeholders should have the ability to visualize and download data, including related to commercial and industrial emissions, in the context of aggregation that protects Personally Identifiable Information (PII) but is not unduly restrictive. For stakeholders to access anonymized data, and for the CPUC and its sister agencies to fully leverage disaggregated data, a secure GIS portal with login and request tracking would be appropriate.

LGSEC developed a series of qualifying use cases in the course of informal discussions with the CEC, which are summarized in Appendix A. These uses are based on a legal review of data access rules,[15] which indicates that LGs can generally be treated in a similar fashion as authorized state agencies (e.g., PII) in terms of information sharing. The identified use cases

[14] The potential includes Rule 21 fast track interconnection screens and the map can be found here: https://solar.energyatlas.ucla.edu/map.html

[15] Guided by D.14-05-016.

align with LG's role as the line of first defense and providers of last resort to the communities they serve.

84. *Explain if and how the statewide tool should adapt to data needs from other proceedings such as those addressing building decarbonization, demand response, and integrated distributed energy resources, to avoid duplication of efforts?*

To align with ongoing proceedings, other state agencies, and the Public Utility Code, LGSEC offers a list of complementary roles that CATALENA could serve. Table 1 focuses on active CPUC and CEC rulemakings and proceedings. A throughpoint for each of the activities across agencies is the precedent set in the CEC's Docket 15-OIR-05.[16]

As reflected in the use cases, CATALENA's original base function to deliver demand data and information[17] should be modernized to encompass the broader set of issues with which California is grappling. Accomplishing this would require transitioning the Atlas backend database from one that manages monthly data to one that manages 15-minute data. The tool contains a good deal of program participation data for existing areas, but not actual bill amounts.

Table 1: Complementary Roles of CATALENA and Other Proceedings

Proceeding	*Data Needs*	*CATALENA Complementary Role*
R.13-11-005 Energy Efficiency Rolling Portfolio	Program Admin insight for program design, implementation and customer targeting	Non-PII, aggregated demand GIS maps used by stakeholders outside of program admin use cases
R.19-09-009 OIR Regarding Microgrids Pursuant to SB 1339	Issues for Phase 2 of Track 4 and 5 include addressing value of resilience and	critical infrastructure, critical facilities, essential services, community population

[16] CEC Building Energy Benchmarking Program, stemming from Assembly Bill 802. https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=15-OIR-05

[17] Specified in California Code of Regulation. Title 20, § 1353.

	emergency planning data portals[18]	resources) for the community
R.21-06-017 OIR to Modernize the Electric Grid for a High DER Future	DER growth expectations[19],	Setting baselines and forecasts to DER growth expectations[20], which rely upon demand side forecasts, which then inform DRP and IRP activities
R.22-07-005 OIR To Advance Demand Flexibility Through Electric Rates	impacts from Load Management Standards development[21]	As CalFUSE references the MIDAS database, CATALENA must be able to accomodate historic and future rate impacts, and provide insights to impacts from Load Management Standards, as well as DR and DER enablement in a changing landscape for tariff development[22]
ESA	ESA Program Policy and Procedure Manual is periodically updated to guide PA and implementer interventions[23]	The socioeconomic data overlaid with consumption data shall guide EE PAs and eventually the Market Transformation PA,
ESJ Action Plan	ESJ Action Plan 2.0[24] section on Tracking and Measuring	This might include acquiring billing data ($ amount) and arrears data that could be coupled with income information and energy consumption in order to understand energy burden.

[18] Amended Scoping Memo and Ruling Resetting Track 4. Page 5 https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M432/K634/432634549.PDF

[19] OIR page 7. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M390/K664/390664433.PDF

[20] OIR page 7. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M390/K664/390664433.PDF

[21] Summary of section 1.9 of the proceeding OIR. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M496/K285/496285639.PDF

[22] Summary of section 1.9 of the proceeding OIR. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M496/K285/496285639.PDF

[23] https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/energy-efficiency/iqap/2019_statewide_esa_pp_manual_ver-1.pdf

[24] https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M465/K846/465846599.pdf

As previously discussed, while the original intention for developing CATALENA was to provide data to RENs it is critical that the Commission does not view this tool as the primary means of sharing essential data for 3C- and other REN programs.

85. *What additional clarifications are needed to ensure that the statewide Energy Atlas-like tool will be most useful to California energy policy development for the long term?*

CATALENA's original purpose was to provide data and associated insights to help achieve EE targets. In 2022 and beyond, State decarbonization goals, including as advanced through high DER scenarios, and an emphatic emphasis on ESJ communities, requires the Commission to exercise its authority to provide stakeholders with the best information and tools possible.

Data availability remains the most critical element for CATALENA's success. The current UCLA Energy Atlas contains native PII data in the back-end, which is aggregated for display on the front-end website to ensure customer privacy. This allows matching of accounts to parcel and sociodemographic data to enable rich insights into energy use patterns. If the CATALENA implementer were to only receive aggregated data, it would severely limit features and benefits, let alone enable an expansion as recommended in these comments.

The State of California Office of Administrative (OAL) approved regulatory action pursuant to Government Code section 11349.3, which became effective on March 1, 2018 pursuant to Code section 11343.4(b)(3)[25]. Specifically, section 1681 addresses two important definitions that relate to energy data access. One is the definition of a "covered building", which relies on sections 4125 and 6542 of the California Civil Code. The second defines "disclosable

[25] https://efiling.energy.ca.gov/GetDocument.aspx?tn=222962&DocumentContentId=22560

building," which sets a trigger for buildings that must comply with the CEC's Building Energy Benchmarking Program. Most importantly, the data access provisions in the OAL approval apply to all "covered buildings" and not just disclosable buildings that must comply with the CEC's benchmarking program.

The only California Public Utility Code section that addresses data aggregation rules for covered buildings is Section 1683, which is explicit in the number of service accounts, regardless of fuel type. This aggregation rule is three or more accounts in buildings without residential service accounts, and five or more for any covered building with such accounts. Given this code and its active implementation, it is reasonable that the CPUC rely on this approach as the governing language applicable to data aggregation for CATALENA.

As described previously, the CATALENA implementer must have access to meter-level consumption data in order to overlay appropriate socioeconomic, building stock, and other data to produce a tool to enhance the adoption of IDSM interventions.

86. *Is a long-term funding commitment needed, and if so, provide detailed suggestions for how much and how it should continue to be funded.*

Long-term funding is essential to renovate, nurture, and deploy CATALENA in a way that fully services stakeholders. The precise amount of required support should be determined by the entity issuing the RFP, preferably, the CPUC or LGC. For purposes of rendering a decision in this proceeding, it would be reasonable to assume the need for $5 million a year for the first three years, and $3 million annually thereafter.

The initial decision identified $2 million a year in operating expenses, presumably on the assumption of a statewide version of the current Atlas that contains monthly data. Current costs might be twice that to incorporate new program data, with another $1 million to account for the

interval data. Early work would need to include stakeholder meetings to secure agreement on the use cases, establishing the system and functional requirements, and documentation.

Said differently, the identified funding level would have to cover:

- Back-end database expansion.[26]
- Data storage / IT costs.
- Annual/biannual data updates, cleaning, geocoding, and other processing.
- Provision of standard data aggregations to populate the front-end website.
- Website maintenance and updates as new data years become available.
- Website hosting.
- User training.
- Ongoing user support and occasional provision of custom data aggregations to LGs and other users.

Optimally these basic features would be expanded upon to include:

- EE program enrollment tracking,
- EE program effectiveness metrics,
- DER installation progress tracking,
- DER planning, including rooftop potential, grid capacity, ability to support local demand, such as in the Community Solar Tool.
- Electric vehicle charging tracking,

[26] Modification of the back-end database to accommodate interval data, likely requiring cloud storage and associated costs, with additional security provisions, will be a substantial expense, as will provision of information about new program metrics, likely both on the website and as custom aggregated data sets in response to local government requests.

- Interval data, for which a number of issues related to exactly how the information would be ingested, processed, stored, and displayed need to be addressed, including an identification of key metrics, how they are calculated, at what scale, on what timeframe, and how often would it be updated.

Data Sharing for Commission-Authorized Energy Efficiency Programs

87. *Should IOUs be ordered to provide disaggregated consumption data to 3C-REN and other RENs, upon their request, for the purposes of REN energy efficiency program operations and measurement and verification activities? If so, please specify:*
a. The specific data that IOUs should be required to share
b. Frequency of data sharing
c. Which entity should incur associated operational costs
d. Compliance requirements, conditions, and other considerations.

Yes, the IOUs must provide disaggregated consumption data as the basis to evaluate EE programs, including enrolled and non-enrolled accounts to enable effective comparisons. Such an approach is supported by the plain language of D.11-07-056, which allows for the provision of non-aggregated data (covered and consented) to support implementation and evaluation of energy efficiency and demand side programs overseen by the Commission.[27]

a. The specific data that IOUs should be required to share

While LGSEC is obviously supportive of an enhanced CATALENA, the tool will not address Normalized Meter Energy Consumption (NMEC) program data needs. The data motion is asking for data at the site level, which is required as the information and evaluation basis of 3C-REN's Single-family Home Energy Rating System program.

[27] https://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/140369.htm

Specific data requests related to population level control groups have precedent in Pacific Gas and Electric Company's (PG&E) service territory. LGSEC suggests the Commission enforce statewide uniformity in primary purpose data access use cases.

b. Frequency of data sharing

Non-participant (population) and past project data should be transferred monthly.

c. Which entity should incur associated operational costs

Enabling NMEC programs and the associated cost of data infrastructure was considered and adopted in D.16-08-019 when the Commission allowed the IOUs to request a higher proportion of the Evaluation, Measurement and Verification (EM&V) budget. The utilities may request up to 40 percent of the total evaluation budgets to support and enable NMEC and pay for performance programs envisioned in Assembly Bill 802 and Senate Bill 350:

> "We agree with the staff recommendation to increase the portion of the EM&V budget allocated to the program administrators to a maximum of 40 percent. This is in recognition of the increased emphasis on 1) NMEC and Pay for Performance, and 2) upfront planning and market assessment associated with the market transformation and other programmatic emphases in SB 350 and AB 802." D.16-08-019

The operational costs of using the data are already embedded in REN program budgets. Since NMEC is designed to enable embedded M&V, improve actionable intelligence and reduce ex-post evaluation costs, it is an appropriate use of ratepayer funds already allocated to the portfolio operations.

d. Compliance requirements, conditions, and other considerations.

As guided by the Commission's data access decisions, the utilities should establish privacy agreements for data transfer. RENs should be allowed to designate their agents of choice to manage and handle information, including maintaining security and privacy.[28]

88. *Should IOUs be ordered to provide disaggregated consumption data to implementers (including third-party implementers) who are contracted to deliver Commission-authorized energy efficiency programs in their territory, for the purposes of energy efficiency program operations and measurement and verification activities? If so, please specify:*

Yes. The plain language of D.11-07-056 allows for the provision of non-aggregated data to support implementation and evaluation of energy efficiency and demand side programs overseen by the Commission. Third-party programs should likewise have access to needed data to enable smooth operations and accountability.

a. The specific data that IOUs should be required to share

The specific data required depends on the program being implemented. PAs should be treated commensurately in terms of data sharing requirements. That is, in general, RENs should be provided the same information as is available to IOUs for the purpose of developing, implementing, and evaluating demand management programs.

b. Frequency of data sharing

Examples of specific data to share at what frequency include:

- Annual
  - Monthly kilowatt-hours (kWh) and kW and bill amounts.
  - Hourly.
  - 15 minutes.
- Quarterly
  - Monthly kWh and kW and bill amounts.
  - Hourly.

[28] Local governments should similarly have data access, particularly to enable them to develop and maintain greenhouse gas emissions inventories.

    - 15 minutes.
- Monthly
    - Monthly kWh and kW and bill amounts.
    - Hourly.
    - 15 minutes.

Gas usage data should also be provided to enable cogent electrification measures to be developed and implemented.

c. Compliance requirements, conditions and other considerations.

Non-disclosure agreements should be required between program administrators and implementers.

89. *Provide any additional information related to the 3C-REN motion and data access in energy efficiency programs which you believe may be beneficial to the Commission.*

It is critical that the Commission issue a timely decision on the motion, which in turn is implemented expeditiously by the IOUs. Without access to essential data the RENs cannot effectively undertake NMEC programs, as directed by the CPUC.

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SUSTAINABLE ENERGY COALITION

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Appendix A

D.14-05-016 Use Cases[29]

Use Case 1 "local governments seeking access to aggregate data for use in creating legislatively required Climate Action Plans and [for] implementation of EE programs	1. Aggregated data that illustrate the status of progress toward adopted energy and GHG reduction goals, e.g., total monthly residential energy use at the block group level;
	2. Aggregated data that illustrate the outcomes of a given energy program, e.g., total monthly electricity savings from the Energy Upgrade CA program at the community or sub-community level;
	3. Granular, anonymized data at the address level, on a monthly usage basis, that provide insight into how energy use changes as properties participate in programs, and identify unmet needs in order to plan for future programs
Use Cases 2 and 3 Research Institutions Seeking Access to Energy Usage and Usage-Related Data to Evaluate Energy Policies	Research institutions seeking anonymous, individual hourly energy consumption data with other energy-related characteristics to evaluate energy policies, including EE programs and rate design, and publishing results as statistical coefficients. Thus, the data could be PII if it contained sufficient characteristics to permit reverse engineering, but the published results that describe the influence of energy-related attributes on consumption would not be PII.
Use Case 4 Government Entities Seeking Access to Covered Data to Evaluate Legislatively Mandated Programs	Other governmental entities, like CEC through its Energy Upgrade California Program, want EE program participation data by customer identification number to be able to cross-reference this information with other program data, and thereby evaluate government-sponsored, legislatively mandated programs, while publishing results in aggregate, non-PII form. These data are highly granular but non-PII, while [it] may be 'reversed engineered," … the published results would be non PII
Use Case 5 On-bill Energy Efficiency (EE) Financing	Environmental non governmental organizations, like Natural Resource Defense Council (NRDC), request PII customer repayment history and energy consumption pre- and post-retrofit for EE, to support general financial decision making on energy-efficiency investments through on-bill financing, and produce results that provide aggregate, non-PII findings that link energy usage to other relevant characteristics (e.g. geography, building and customer financial characteristics, and financing vehicles). In this case, the data is definitely PII, but the results – a decision whether a particular area, type of building, type of customer, or type of financing is viable – is non-PII
Use Case 6 Third-parties, e.g. Solar PV Installers, Seek Access to Anonymous Data to Identify Households that could Benefit from their Services	Third-parties, e.g. Solar PV Installers, Seek Access to Anonymous Data to Identify Households that could Benefit from their Services metering program, aggregated to a geographic area that protects PII, to reduce the product development and engineering costs in order to advance residential and commercial solar installations. In this case, the data, prior to aggregation, is PII, while the result – the identification of areas where solar power is financially feasible – is non-PII.

[29] This table is a summary of the use cases in D.14-05-016 and contains verbatim text from the decision

Use Case 7 Building Owners and Government Agencies Desire Building Usage Data	Building owners and managers want monthly energy consumption by building to conduct benchmarking analyses pursuant to AB 758 and AB 1103, and publishing aggregate, non-PII results. In this case, raw data that is PII would likely be needed, but results concerning program efficacy are not PII. Moreover, it may prove possible to anonymize such data through an algorithm
Use Cases 8 and 11 Third-parties Seeking More Granular Data on EE Programs	Use Case 8: EE contractor seeking CPUC-released aggregate data, similar to what the California Solar Statistics program releases, but using Energy Upgrade California data and other aggregate energy consumption data, to help validate the quality and value of EE work. Here, the raw data studied is likely PII, but the program result – the validation of the EE work – does not necessarily reveal PII. Once again, it may prove possible to apply an algorithm that provides anonymization that cannot be reverse engineered Use Case 11: EE program implementers, contractors, consultants, research institutions, city and county governments or other entities requesting micro data on energy consumption, payment data, EE program participation, and retrofit activity to identify trends in customer participation in efficiency programs and retrofit activity. The requested data must include PII to allow linkage with other relevant data, but the results of analyses (e.g. trends) would not be PII
Use Case 9 CSD Proposal for Low-Income Energy Assistance Data Sharing	[T]he Department of Community Services and Development (CSD) proposed to the Commission that a supplementary use case be developed to address data sharing in connection with the coordination of the low-income customer programs of the Investor-Owned Utilities (IOUs) and the federally-funded low-income client programs of CSD
Use Case 10 Energy Commission Seeks Access to Customer Data from Utilities for Title 24 Building EE Compliance	As a means to verify compliance with the Title 24, Part 6 Building EE Standards as relate to Heating, Ventilation and Air Conditioning (HVAC) system efficiency and installation requirements, the CEC's Compliance and Enforcement Office needs to determine what HVAC systems are being imported into and sold in California for installation within the state. This determination can be made by tracking an HVAC's serial number, whereby any HVAC unit sold in the state has its serial number entered into a database so that numbers in this database can be compared to HVAC units installed under the permitting process in local enforcement agencies throughout the state. This information can also be used for, and should be a requirement of, any HVAC rebate program, whereby a rebate will be issued only for those HVAC installations where the proper permitting by the local enforcement agency has been accomplished. The Energy Commission is requesting that utilities require their customers to provide these data as a condition of HVAC rebates and utility service
Use Case 12 DECA Seeks Granular Data to Model Energy Usage at Sub-Hour Time Intervals	The Distributed Energy Consumer Advocates (DECA) submitted and extensively described a use case during the Working Group sessions relating to grid-related energy usage information to support DG. DECA described its use case as providing the public with a working model of the majority of California's electricity grid, with a particular focus on the ability to model all electricity consumers' consumption at sub-hour time intervals and to tie that data to actual weather

Local Government Use Cases

Use Case	**Data Required**	**Frequency of Request**	**Description of Need**

Community-wide data requests and equity assessments	15-minute interval data for all customer accounts and corresponding address, line segment, service voltage, and electrical panel capacity monthly data for non-smart meter accounts (e.g. street lights) tariff or rate for each customer including CARE/FERA	Annual	Either a CATALENA (CPUC) like implementation, or at least a consistent deployment of PGE's EDRP system downloadable by zip code, with instant access.
Climate Action Plan (CAP) development	Monthly consumption data for every service account; tariff or rate for each customer including CARE/FERA	Annual	LGs often find masked data in their CAP requests, which prevent the creation of an actual climate action plan.
Community Marketing, Education and Outreach (ME&O) related to energy programs	Historic consumption to track upward or downward trends in consumption so that appropriate ratepayer or other interventions can be recommended to target populations	Monthly	LGs that want to play an active role in a marketing sector or technology specific program would benefit from knowing energy trends in their jurisdiction.
Battery storage adoption	customer accounts & addresses with battery storage; battery capacity	Monthly	Similar to the DOE/LBNL/NREL "tracking the sun" (TTS) database, a similar option for battery storage would help LGs ramp up marketing and outreach to constituents, and plan for resilience.
Electric vehicle adoption	customer accounts & addresses with EVSE; customer accounts that received Clean Fuel Rewards	Quarterly	LGs may not always have digitized permitting systems and IOUs do have online records of EV installations. For mobility and transportation electrification planning, LGs would benefit from this data.
Due diligence for resilience and disaster planning	customer accounts mapped to addresses or Unique Building IDs (UBIDs)	Annual	LGs, as a result of local hazard mitigation plans (LHMPs), are required to plan for disasters. Identification of vulnerable populations, CARE/FERA customers, and critical facilities AND critical loads would are of importance for LGs to know.
PSPS preparation	List of all customer accounts on line segments that were affected by a PSPS event	Bi Annual	LGs are chiefly responsible for safety in their communities and scenario planning for which accounts are connected to what circuit

			is paramount.
Behind the meter (BTM) solar analysis	List of all service accounts that have installed solar; NEM version	Quarterly	Solar installations need to be instrumented to allow for a record of both solar production and energy consumption by owner (not just net demand from the grid). This information needs to be collected and recorded.
Data request for LG owned and/or operated assets	List of all service accounts that have SIC, NAICS or other designations aligning with public assets and facilities	Annual	For regional entities, COGs, RENs, joint powers authorities, as well as the CEC, having and maintaining a list of all public assets is critical
Internal agency directives	Varies	Varies	LGs have various energy action plans and internal directives that mandate a multitude of energy targets for either their own assets or community performance of energy
Energy project development	List of customer accounts and associated interval data for the last 3 years	On demand	Often, LGs have multiple departments and billing centers that manage their energy bill payments and records. Currently, these are called Top SA accounts or encost reports. These are critical for following ASHRAE protocols for benchmarking, audits and RCx, as well as required for AB 802 type ratepayer programs.
Nano/microgrid development	List of customers connected to a specified line circuit or downstream of a specified substation	On demand	The planning of a multi-customer microgrid requires knowledge about potentially affected customers that may receive electricity to a physically connected microgrid.
Energy efficiency program evaluation	Hourly consumption data, details of EE measure(s)	Hourly	More sophisticated metrics for longitudinal understanding of success or gaps

Update and expansion of the Energy Atlas	Monthly customer billing and consumption data for all service accounts, including meter address, consumption, rate/tariff, NAICS code, lat/lon, CARE/FERA	Annual	Meter level consumption data is linked to parcel building attributes (size, year built, use type), census socio-demographics and can be aggregated to various geographic scales (city, census tract, county) to provide local governments, researchers, the public, etc. with energy data in context. Can be useful in EE targeting, or CAPs/inventories, though current 15/15 rules hinder sharing of non-res data.