

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

Order Instituting Rulemaking to
Consider Smart Grid Technologies Pursuant to
Federal Legislation and on the Commission's
Own Motion to Actively Guide Policy in
California's Development of a Smart Grid
System.

Rulemaking 08-12-009
(Filed December 18, 2008)

**COMMENTS OF
THE LOCAL GOVERNMENT SUSTAINABLE ENERGY COALITION
ON PROPOSAL FOR ENERGY USAGE DATA CENTER**

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FOR Local Government Sustainable Energy
Coalition

December 17, 2012

I. INTRODUCTION

In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission, and with the Ruling, the Local Government Sustainable Energy Coalition (“LGSEC”)¹ submits these comments on the proposal to establish an energy usage data center. The LGSEC has for many years described the challenges local governments face in obtaining energy usage data necessary to develop energy action, climate action, and other planning tools, and accompanying implementation programs. The LGSEC appreciates the Commission’s efforts to ensure all entities that require energy usage data are able to obtain it.

It has been nearly five years since the LGSEC first highlighted the need for greater cooperation by the utilities in providing aggregated energy usage data to local governments. While some advancements have occurred, this data is provided inconsistently across the State. The LGSEC is concerned that further time will elapse while the Commission considers the current proposal, possibly establishes a new docket, deliberates, makes any rulings, and sets up any new data center it might order. This could take 18-24 months, if not longer. Local governments need access to this data immediately. Local governments are preparing Climate Action Plans and Energy Actions Plans now and need sector data to accurately complete those plans.

There are existing mechanisms whereby some local governments are receiving data in a format they can use. The Commission should ensure that during any further deliberations, the utilities move ahead with providing the data local governments need. Below the LGSEC describes a workable model that should be expanded immediately. We also respond to the questions posed in the Ruling.

¹ Across California, cities, counties, associations and councils of government, special districts, and non-profit organizations that support government entities are members of the LGSEC. Each of these organizations may have different views on elements of these comments, which was approved by the LGSEC’s Board.

II. The City of Irvine Pilot Should be Brought to Scale

In September 2009, CPUC Decision 09-09-047 required Southern California Edison to set aside \$200,000 for the City of Irvine pilot program to provide energy usage data. The goal of the pilot was to develop a GIS-based energy usage protocol that can help local governments identify and target community energy efficiency opportunities. The LGSEC offers that the Irvine pilot can serve as a model for providing energy usage data to local governments. The Commission has already authorized the use of ratepayer funds to build out the Irvine pilot, which the Commission intended be used to build out this capability. D.09-09-047, p. 247, states: “Any protocol developed from this effort should be disseminated and utilized widely.”

The Irvine pilot program objective’s include 1) Design and build a prototype GIS tool that analyzes community utility usage data; 2) Evaluate geographic areas for target marketing of energy efficiency programs and the effectiveness of outreach and incentive programs; and 3) Further Energy Efficiency programs in support of the *California Energy Efficiency Long- Term Strategic Plan*.

The pilot’s four guiding principles are designed to allow the pilot to be expanded to other local governments:

- Applicability: Consistent methodology and criteria acceptable to local governments
- Scalability: Grow and accommodate new sources and formats of data
- Extensibility: Use typical GIS standards and programming language and integrate with other applications
- Capability for long term management: Keeping up with upgrades and database changes

A key feature of the Irvine pilot was the development of energy maps that take community energy usage data and queries it in a way that identifies neighborhoods and districts

in the city with higher/lower energy usage without violating customer privacy rules and presents this information in a series of energy maps and comparative graphs. The maps, which are still being developed, will visualize and analyze energy intensity data and are spatially linked to tax assessor information, local zoning and general plan designations, building vintage, type of utility customer via census information, and utility customer program participation, while not violating customer confidentiality.

The desired results for the Irvine pilot are to identify gaps, reach underserved populations, and target existing, underutilized energy efficiency programs. The pilot uses micro-targeting and advanced evaluation of utility demand side management programs. It sculpts future energy efficiency program design to demographics and building information. It also uses an evaluation and measurement process that allows near real-time feedback.

Other local governments are in serious need right now of the energy usage data that Irvine is able to obtain with this tool, which has been developed at ratepayer expense. PG&E is developing a similar tool using the same GIS platform. The Commission can direct the utilities to expand the availability of this and other similar GIS data mapping platforms right now to other local governments.² This will avoid the delay that is inherent in the current process of evaluating whether to establish an energy usage data center.

III.AB 1103 Integration

The California Energy Commission will this month consider revised regulations to implement Assembly Bill 1103. AB 1103 requires benchmarking of all buildings in California for their energy usage upon point of sale. The proposed regulations require all non-residential

² The Commission should compare the costs of additional funding needed to build from these pilot efforts to the costs involved in establishing an Energy Data Center.

buildings to be entered into the U.S. EPA Energy Star database. Under AB 1103, building owners are required to submit in electronic format reports from Energy Star.

However, a fundamental problem with AB1103 remains – the law and the California Energy Commission’s implementing regulations adopted December 17, 2012, direct utilities to provide “all energy use data for the entire building,”³ but do not explicitly state that the consent of separately metered tenants is not required in the course of compliance. The Commission should affirm to utilities that AB 1103 as a state-mandated energy efficiency program (empowered by both enabling legislation and SB 1476 (e)(2) and (e)(3)) is sufficient to compel the disclosure of monthly energy usage data aggregated to the level of the whole building – no matter how many tenants or how whether one tenant may dominate usage. By passage of AB 1103 (and SB 1476 (e)(3)) the Legislature determined that the public interest in energy efficiency (such as reducing climate change emissions) is greater in some instances than the absolute protection of energy customer privacy. The Commission should further leverage the data and work being performed by the Energy Commission as it looks at how best to make energy usage data available.

IV.Responses to Questions in the Ruling

- *Is a rulemaking necessary under current practices to make aggregated and anonymized data available to the public? Should the Commission establish an energy data center?*

The LGSEC’s primary interest, as expressed over many years and in various proceedings, is timely access to aggregated and anonymized data, in electronic format. Local governments require energy usage data to meet local and state policy mandates, including but not limited to energy management and climate action plans. The LGSEC was hopeful that D.11-07-056 would have been sufficient to compel the utilities to provide this data for the purposes of achieving these public policy objectives. At the same time, as utility customers, local governments are

³ <http://www.energy.ca.gov/2010publications/CEC-400-2010-004/CEC-400-2010-004-15DAY-REV1.pdf>

concerned about the cost and impact on rates of yet another CPUC proceeding, and establishing another administrative organization, with ongoing costs. The LGSEC urges the Commission to identify the least costly administrative structure for ensuring that local governments can obtain access to energy usage data.

Further, the LGSEC recommends that the Commission leverage the parallel national effort of the U.S. Department of Energy, which has constructed a national Building Energy Performance Database (“BPD”) – with similar attributes, data, and purposes to the CPUC Energy Data Center. While the CPUC evaluates privacy, U.S. DOE has set a healthy criterion of ensuring that any analysis performed by the DOE BPD must include at least 10 subjects. The Measurement and Verification data sets managed by CPUC are being applied to the DOE BPD. The Commission should evaluate whether the benefits of the CPUC Energy Data Center could be obtained at lower cost (and greater value to the nation) by integrating an Energy Data Center with BPD.

- *What is the value of an energy data center for utility customers and what could the cost be?*

Energy usage data is valuable to local governments and the communities they represent for reasons. First, local governments must create city-wide and county-wide climate protection strategies that examine and address all the sectors and all the activities within their communities. Local governments, therefore, exert tremendous influence over a range of issues and policies that will have a decisive effect on achieving California’s AB 32 and *Energy Action Plan* goals. Additionally, energy data is fundamental to local governments’ ability to track progress toward their energy and greenhouse gas (“GHG”) reduction goals. Without adequate data, local governments are unable to communicate to their leadership and to community members whether or not targeted reductions are being achieved.

Local governments need Sector data for residential (by single-family and by multi-family) and non-residential (by commercial and by industry). Industry specific data needed should be aggregated by NAICS code and, for example, provide analysis to be able to say for a certain city, 20% of energy is consumed by full-service restaurants.

Second, local governments are tasked with designing and implementing strategies that remove barriers to energy and cost savings in residential and commercial buildings. Improved access to energy residential and commercial energy data enables local governments and their partners to more effectively and efficiently direct services and incentives to energy consumption “hot spots,” i.e., areas of high energy use intensity.

Finally, local governments are also legally responsible for a number of local, regional, and State mandates related to land use and transportation, integrated resources management, air quality, energy efficiency codes and standards, and green building practices.

Given this, it is essential that local governments, whether individually or acting regionally, receive detailed information about energy consumption in their jurisdictions. These requests have been made of the utilities by a number of jurisdictions for the following purposes:

- ✦ Provide targeted market research for Energy Upgrade CA and other building energy efficiency programs in order to:
 - Combine with data from County Assessor and GIS Databases to target areas with high energy efficiency potential;
 - Develop community/neighborhood marketing approaches.
- ✦ Develop local (city) and regional (Countywide) Climate Action Plan (CAP) in order to:
 - Create consistent regional quantification of GHGs;
 - Develop targeted, regional strategies for GHG reduction measures;
 - Combine results with data from a Regional Climate Adaptation model (modeling that forecasts climatological variances);
 - Update local General Plans with informed energy strategies and objectives.

✦ Show compliance with other requirements such as SB 375, Attorney General Regional Plan mandates, AB 32 in order to:

- Assist in developing regional climate action plan strategies and measures;
- Quantify benefits of local government programs.

As indicated above, the Commission must make the basic information described above available immediately, building on the pilot work conducted in Irvine. Should the Commission move ahead with an Energy Data Center, there are other potentially valuable ways in which the Data Center could aggregate and combine different types of data. For example, data could be compiled to make markets more transparent, using techniques such as evolving benchmarking and asset rating tools.

One specific example is combining tenant usage data with building information to produce comparative energy intensities for rental markets (residential and commercial). The data center could combine building information and confidential tenant billing information to produce aggregated building metrics that would not violate confidentiality requirements. Such metrics could be made available through a public disclosure portal to inform prospective tenants on the energy performance of various rental properties. Some progress in this area has already begun (e.g., PG&E's automated US EPA benchmarking service). A data center could establish a system that is more directly relevant to California's unique needs, opportunities, and legislative requirements.

The LGSEC looks forward to reviewing the data that other parties with better information submit about the cost of an energy data center.

- *How should the energy data center be set up? We have proposed one model but others may be possible within the confines of statutes, rules, and codes. What are the responsibilities of the energy data center beyond providing aggregated data to utility customers and the general public? Should additional research and valuation of*

Commission programs be included? How would they differ from existing research and evaluation being conducted by the Commission?

As discussed in these comments, the LGSEC remains open to the idea of an energy data center. At the same time, we believe that there may be sufficient work ongoing by the utilities, local governments, and the Energy Commission to facilitate the data exchange that is the goal of the Ruling.

- *How could a data center be funded? Cap-and-trade auction revenue administrative funds, electric program investment charge funds, energy efficiency evaluation, measurement, and verification funds, a new source from utility customers? (Note, no decision on funding will be reached in this phase.)*

The LGSEC appreciates the Commission's interest in identifying a funding source for a possible Data Center. Of the options listed above, the LGSEC suggests that the Commission could decrease the amount of EM&V activity, and focus those funds on a Data Center, if the Commission moves forward with this idea. The potential funding sources listed above are all sources the LGSEC and members have been looking toward as possible resources for programs that deliver energy and GHG savings. The LGSEC also notes the recently-released Little Hoover Commission report on California's energy regulatory structure, and questions whether it is well-advised to create another energy entity at this time in light of that report's recommendation for energy agencies to coordinate priorities and programs.

- *How can the Commission ensure the protection of customer-specific energy usage data at the energy data center and provide the necessary oversight? Are cyber security requirements necessary? Are further guidelines for aggregation necessary for the data center? If so, what should those specific guidelines be?*

The LGSEC has outlined in other pleadings related to energy usage data the information that local governments require. We provide that information again below.

At least one utility has raised concerns that consumption data provided to local governments would be subject to a public records request. A variety of information and data that

local governments currently possess is not subject to the Public Records Act, e.g. gross receipts data from businesses that are used to calculate their annual business license taxes, individual customer data for water, sewer or refuse services provided by the city or county, and other data which is not applicable to the Public Records Act because it is protected by individual privacy rights. Local governments would deal with energy data in the same way. In addition, an executed Non-Disclosure agreement would protect this data from a public request.

Specific Data Needed by Local Governments

Local governments for the past two years have been requesting consumption data from the utilities for the programs described above. The breakdown of information needed has been consistently specified and is repeated below.

Aggregated Data

- Monthly consumption (kwh, therms)
- Aggregated by Residential and non-residential tariffs
- Aggregated by industry sector (NAICS code) for use in Climate and Energy Action Plans
- Provide for each Incorporated City and County Unincorporated Areas
- Provide for each Zip Code

Disaggregated Data

- Monthly consumption (kwh, therms)
- Provide for all tariffs
- Provide for each Incorporated City and County Unincorporated Areas by:
 - Zip Code + 4
 - County Assessor Database Parcel
 - Meter

Confidentiality

- Local governments do not need property owner names or account numbers.
- *In addition, comments and replies should address how the Commission should proceed, whether through another phase of this proceeding or through another*

proceeding. Comments and replies should also propose a schedule that will lead to a decision concerning the energy research center by the end of 2013.

The LGSEC respects the Commission's need for a comprehensive deliberative process. At the same time, local governments have had to devise workarounds, missed deadlines, and otherwise been disadvantaged by the unwillingness of some of the utilities to provide energy usage data in a comprehensive format. It appears from the above question is could be another year for a decision on the manner in which the data will be provided. There is then another process to actually establish the energy data center. That means it could be as long as two years before the energy data center is actually operational. Local governments have mandates to meet now, and must be able to access needed data now. The Commission must ensure that as these deliberations proceed, local governments are able to obtain the data they need for current programs. These include ratepayer funded programs recently authorized for the 2013-2014 energy efficiency Transition Period.

V. Next Steps

The LGSEC urges the Commission to expedite provision of energy usage data to local governments. The Commission should hold a workshop early in 2013 to assess ongoing programs, including the Irvine pilot described in these comments, and determine how those tools can be made readily accessible to all local governments, and potentially other parties. The Commission may choose to consider broader aspects of an energy usage data center concurrently.

VI. Conclusion

Local governments need energy usage data in a dynamic format, that can manipulated electronically, for purposes that include Commission mandates, and that address other State and

Federal programs. The Commission must direct the utilities to immediately provide this data.
Failure to do so places local governments in jeopardy of not fulfilling these mandates.

Respectfully submitted,

A handwritten signature in blue ink that reads "Jody S. London". The signature is fluid and cursive, with the first name "Jody" being the most prominent.

Jody S. London

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