

In the Matter of:)	Docket No. 09-IEP-1
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Preparation of the)	COMMENT ON DRAFT 2009 IEPR REPORT
2009 Integrated Energy Policy Report)	
(2009 IEPR))	
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09-IEP-1	
DATE	OCT 28 2009
RECD.	OCT 28 2009

Comments of the California Public Utilities Commission's Energy Division on the *Draft 2009 IEPR Report*

The California Public Utilities Commission's (CPUC or Commission) Energy Division respectfully submits these comments to the California State Energy Resource Conservation and Development Commission (CEC or Energy Commission) in regards to the *Draft 2009 Integrated Energy Policy Report* (Draft IEPR). The CPUC is pleased to be collaborating with our sister agency, the Energy Commission, in the 2009 Integrated Energy Policy Report (IEPR) proceeding (proceeding). We commend the Energy Commission and its staff for preparing this important draft policy document, which is both comprehensive and articulate. The CPUC has been an active participant in the 2009 IEPR process, collaborating on issues ranging from demand forecasting and energy efficiency quantification to a joint proposal on implementation of once-through-cooling (OTC) replacement infrastructure in support of the State Water Resources Control Board's draft OTC policy.

Our comments on the Draft IEPR are principally focused in seven main areas:

- Efforts around improving, updating, and making the CEC's Demand Forecast more transparent;
- Coordinated resource planning;
- Collaboration between CPUC and CEC regarding Energy Efficiency;
- Enhancing current efforts to address Distributed Generation;
- Activities ongoing at the CPUC regarding Feed-in Tariffs;
- Transmission coordination venues already available with the CPUC;
- Responses and clarifications to the Draft IEPR on the CPUC and Nuclear Power Plant licensing.

Demand Forecast

We acknowledge the Energy Commission staff's considerable efforts to produce reasonable forecasts amidst great economic uncertainty. We also appreciate the way in which stakeholders were brought into the process through the Demand Forecasting and Energy Efficiency Quantification Project (DFEEQP) working group, and the degree to which parties' input was reflected in the Revised Forecast and subsequent adjustments based on comments at the September 21, 2009 workshop. In particular, we appreciate the Energy Commission staff's flexibility to incorporate the impacts of the CPUC's Decision (D.) 09-090-047, a landmark decision approving the investor-owned utilities' (IOU) 2010-2012 energy efficiency portfolios and a \$3.1B commitment to reducing energy demand.

Notwithstanding notable improvements in this IEPR cycle, the CPUC is compelled to press for even greater commitment from the Energy Commission to further improve the capabilities and transparency of its demand forecasting tools. We reiterate our request, first submitted in comments to the Draft Staff Forecast, that the Energy Commission conduct a thorough review of its demand forecasting models and support consideration of updating these tools to meet statewide planning needs. In our collaboration with Energy Commission staff, we observed that these tools are perhaps unduly data intensive, insufficiently transparent, and not readily adapted to responding to multiple data requests from reviewing parties. Given the high profile and ubiquitous use of the Energy Commission's demand forecast in various planning venues, including the CPUC's Long-term Procurement Plan (LTPP) and the California Independent System Operator's (ISO) transmission planning process, there is an urgent need to commit sufficient resources and staff to acquiring needed state-of-the-art forecasting tools and methods.

The *Draft IEPR's* recommendation to commit necessary resources to forecasting uncommitted energy efficiency impacts is commendable. While we agree this is an important capability, we believe the first priority should be to update the demand forecasting models, and by so doing, enhance stakeholder's access to the underlying data and methodologies embedded in the models. We note that some members of the DFEEQP working group have suggested specific off-the-shelf products that may be suitable to the Energy Commission's needs and feasible to implement prior to the 2011 IEPR cycle when the next long-term forecast is produced. We urge the Energy Commission to consider putting new and improved models in place in time for the 2011 IEPR if feasible.

Coordinated Electricity System Planning

The *Draft IEPR* discusses several challenges with coordinating and streamlining the collective responsibilities of state agencies in meeting policy goals. During this IEPR cycle, initiatives such as the joint energy agency proposal on OTC replacement infrastructure have emerged as potential models for coordination among state energy planning agencies. The CPUC supports these types of collaborative efforts to effectively leverage and coordinate the respective functions of the energy agencies.

The *Draft IEPR* emphasizes an even greater need for coordination and asserts that the logical arrangement is for the Energy Commission to take lead responsibility for planning statewide infrastructure requirements in the IEPR proceeding. The IEPR Committee proposes a “need assessment/need conformance” process for new generation infrastructure, whereby responsibility for determination of need would reside in the biennial IEPR, and subsequent generation approvals would be governed by conformance to identified needs. The *Draft IEPR* recommends seeking legislative authority for an explicit need conformance process for the power plants CEC licenses directly; and for its need assessment conclusions to be used by agencies with jurisdiction over power plants it does not license.

While the CPUC concurs that there is additional room for improved state-wide infrastructure planning, we would discourage the CEC from designing a need assessment/conformance process at this time. Such a process appears inconsistent with California’s current electricity market structure, and has the potential to narrow the range of resources able to meet the identified needs to such a degree that market power can be exerted by resource or property owners. As the CEC points out in other areas of the document, there are often multiple resources that can meet a particular grid need. Generally, the broader the identified needs are that come out of this process, the more tools buyers and sellers can bring to bear to meet them and ensure that these needs are met at lowest cost to ratepayers.

At the October 14, 2009 IEPR Committee Hearing, a representative from Independent Energy Producers underscored the need for greater coordination across state planning agencies, but expressed skepticism that a legislative approach would likely achieve desired outcomes. Instead, an informal dialogue between the agencies, with stakeholder involvement, was suggested as a more effective alternative. The

CPUC supports this approach and welcomes a direct exchange of ideas with Energy Commission towards common objectives. Coordination between the IEPR process and the CPUC's long-term procurement planning proceeding continues to be crucial.

The CPUC acknowledges the IEPR Committee's efforts to propose solutions to the coordination challenges associated with regulatory approvals in California. We look forward to further discussion with the Energy Commission on how to make progress in this area, but do not believe that reviving a full needs assessment in the IEPR process is the wisest approach given the current market structure and challenges we face.

Energy Efficiency

As we move into the AB 32 implementation period it is extremely important for the three lead agencies working on energy issues in California (Energy Commission, California Air Resources Board, California Public Utilities Commission) to focus on building bridges between our agencies, between our work priorities, and between our staff. The energy efficiency team at the CPUC highly values this interagency collaboration, has found it largely effective in the last several years, and looks forward to continuing collaboration as we strive together to maximize benefits to California citizens and ratepayers towards AB 2021 and AB 32 goals. We have reviewed the *Draft IEPR* and find it valuable work with the right priorities identified in the energy efficiency area. A few specific comments are below:

1) **Zero Net Energy Buildings**: We welcome the *Draft IEPR* focus on establishing a Zero Net Energy (ZNE) building Task Force and anticipate good collaboration with CEC here, both in terms of utility programs that can support moving Title 24 to ZNE by 2020 (residential buildings), as well as definitions and other coordination needs.

Two important goals for ZNE commercial buildings were included in the California Long Term Energy Efficiency Strategic Plan (2008 "Plan"). These are: 1) that all new commercial buildings in California shall be zero net energy buildings by 2030; and, 2) that 50% of existing buildings shall be retrofit to be zero net energy buildings by 2030. In response to these goals and the identified Plan strategies, the CPUC has initiated a series of workshops on Commercial Buildings "Pathway to Zero," which started on October 19, 2009. CEC staff have been invited to, and are participating in, this workshop series which will focus

on both new and existing buildings. The importance of ZNE buildings was identified, of course, previously in the CEC's 2007 *IEPR*. We anticipate that priorities for interagency, and agency-utility coordination, will be identified as part of the Path to Zero workshop series. Affecting such coordination is a very high priority for the CPUC and we look forward to further cooperation with both the Energy Commission and the Air Resources Board in this important area.

Finally, we note that as a result in part of the Plan, IOUs have adopted for 2010-2012 an aggressive Consumer Electronics and Plug Load program to work upstream with major manufacturers and retailers of home consumer electronics to accelerate efficiency gains in this growing component of energy use. Launched in 2009, the IOU program will be enhanced in the coming three years and will support the important step the Energy Commission has taken towards ZNE with its newly issued proposed HD TV standards, which represent a leading light on this issue nationally.

2) **Comprehensive Building Retrofit Programs, linked to financing mechanisms**: We welcome the passage and signing into law of AB 758 (Skinner), calling for CEC collaboration with CPUC to develop comprehensive residential and non-residential energy efficiency programs, and accompanying financing.

Currently, the CPUC is collaborating with CEC regarding its proposed Comprehensive Residential Retrofit Program, to be administered by CEC with federal stimulus dollars, by working with the investor-owned utilities to develop a comprehensive prescriptive residential retrofit program, to be filed by utilities in December 2009. The CEC State Energy Program (SEP) on comprehensive residential retrofits has helped shape CPUC and Investor-owned utility (IOU) planning for the new IOU program, and will continue to do so during the implementation phase.

D.09-09-047, adopted September 24, 2009, directed the Energy Division to lead a series of workshops on energy efficiency financing issues culminating with a report summarizing comprehensive statewide energy efficiency financing options in late 2010. This work strongly complements AB 758, and the two efforts will likely be integrated. The CPUC will evaluate in early 2010 whether a dedicated proceeding on financing will be needed as a result of AB 758, or whether financing will be included in the ongoing umbrella energy efficiency proceeding. The CPUC intends to collaborate with the Treasurer's Office on possible financing mechanisms for state buildings.

The CPUC has additionally been working to collaborate with the CEC on coordination issues surrounding use of federal stimulus funds for “PACE” (property assessment clean energy) municipal government bond programs to fund energy efficiency/solar energy technologies. D.09-09-047 directed the IOUs to engage with these emerging PACE (or AB 811/Mello Roos) municipal programs in three clearly outlined areas that reflect the IOU’s core competencies.

3) Roadmap to cost-effective energy efficiency in California: We note the IEPR Committee recommendation to create a task force to work collaboratively on strategies to reach the goal of 100 percent cost effective energy efficiency by 2016.

In 2008, as the CPUC adopted the California Long Term Energy Efficiency Plan (Plan), it committed to periodically updating and strengthening the Plan, and the Plan was simultaneously endorsed by all CEC Commissioners. The implementation process for the Plan has been formally set in motion now with the adoption of \$3.1 billion in IOU programs on September 24, 2009, largely aligned with Plan objectives and priorities. The Plan, and this implementation, provides California with an initial Roadmap of actions needed to achieve all cost-effective energy efficiency in the state. Improved metering technology, for example, is valuable in enhancing program evaluation and consumer behaviors to design more effective programs. In 2010, the CPUC intends to further refine and develop the Plan as a Roadmap of critical actions through several series of market-sector focused workshop. We welcome CEC leadership and collaboration in this effort. In particular, we are planning workshop series in several areas in addition to the ZNE Commercial Building and EE Financing areas noted above. Additional workshop series for Plan areas in 2010 are planned in the areas of: 1) residential retrofits; 2) lighting; 3) workforce, education and training; 4) industrial programs; 5) marketing, education and outreach; and, 6) ZNE residential buildings. In addition, the CPUC’s Energy Division will initiate studies in 2010 on energy efficiency potential and updated IOU energy efficiency goals for 2020; additional studies are planned in the areas of cost-effectiveness tools and methodologies, and Strategic Plan implementation costs. These and related areas compel coordination and collaboration between the lead energy agencies in the state, and we welcome this as we together seek to ensure that all cost-effective energy resources, and related GHG emission reductions, are captured in both the short and long term.

4) Code compliance and HVAC permitting: We note the emphasis in the 2009 draft IEPR on improving compliance with Title 24 for residential buildings and HVAC permitting in California. We also note the

extremely challenging targets for improved code compliance associated with California's receipt of federal stimulus funds.

The CPUC concurs with the importance of dramatically improved code and HVAC permitting compliance to our energy resource and AB 32 goals, and we recognize the Energy Commission's status as lead agency in this area. Code compliance and HVAC permitting were identified as a priority also in the California Long Term Energy Efficiency Plan, in addition to refinements in the cost effectiveness methodology to better align with market transformation. As a result, IOU energy efficiency programs for 2010-2012 include some new innovative programs whereby both the IOUs and local governments will work to complement the Energy Commission's work in this important area. Three new sets of relevant programs were included in that portfolio that may be of interest:

- 1) Local government innovative code compliance programs: Some \$70 million of the overall portfolio was allocated for local government innovative programs in a number of areas, including work to enhance code compliance by training and providing tools to local building officials.
- 2) Utility Code Compliance Enhancement Program (CEP): As a new IOU subprogram, the CEP program will fund workshops and trainings for local government planning department officials on code enforcement.
- 3) HVAC programs on permitting, quality standards, certification of contractors, etc: A new statewide IOU HVAC program was approved for 2010-2012, with six sub-program areas. Several of these sub-programs focus on improving quality installation and maintenance of HVAC systems in the state via several inter-related efforts: a) coordination between contractors/manufacturers/utility program managers with local government building planning officials and others; b) strengthening requirements for HVAC contractor training and certification in the state; and c) workforce training in HVAC contractor area. The IOUs and the CPUC are working to improve HVAC permitting through collaboration with the CEC and its partners, the California State Licensing Board and CALBO.

Distributed Generation

The *Draft IEPR* recommends the Energy Commission and the CPUC open a "joint proceeding to develop a comprehensive understanding of the importance of distribution system upgrades, not only to assure reliability, but also to support the cost-effective integration and interoperability of large amounts of distributed energy for both on-site use and wholesale export." The CPUC appreciates the Energy

Commission's continued attention to, and recognition, that Distributed Generation can play an important role in the state's energy mix.

This type of analysis is critical for successful implementation of renewable resources on the distribution system. However, close collaboration and coordination between CPUC and CEC staff, rather than a joint proceeding, could produce this analysis more quickly and efficiently. Staff already have collaborative processes in place that could be used to serve the purpose of this analysis. The California Solar Initiative research, development, and deployment program is funding the development of technologies that can assist in integrating high levels of renewable generation on the distribution grid. In addition, CPUC staff is working with renewable developers and utilities through various proceedings to better understand how to identify and communicate areas and locations in which distributed generation is of the best value to their systems. Instead of opening a formal joint proceeding, staff from both agencies should coordinate efforts to achieve the goals articulated in the *Draft IEPR*.

Feed-In Tariffs

The *Draft IEPR* recommends that the CPUC "immediately implement technology-specific feed-in tariffs for wholesale renewable distributed generation for projects 20 megawatt (MW) or less in size, including simplified and standardized contracts and reasonable prices." The CPUC is currently deliberating how to design an efficient and effective feed-in tariff program in R.08-08-009 for renewable projects up to 20 MW in size. CPUC staff has issued two proposals through ALJ Rulings on March 27, 2009, and August 27, 2009. Staff has recommended that the CPUC adopt a feed-in tariff from 1 – 10 MW that uses a market-based pricing mechanism and a simplified standard contract. The ALJ intends to issue a decision on feed-in tariffs based on the complete record in R.08-08-009 in the near future.

Transmission Planning

CPUC staff agrees with much of the *Draft IEPR*'s discussion about the need for systematic, coordinated statewide transmission planning. While the Renewable Energy Transmission Initiative (RETI), the recent formation of the California Transmission Planning Group (CTPG), and staff efforts to coordinate inputs and methodologies among the CEC, CPUC and ISO show significant progress in this area, much remains to be done. However, the need for official verification of coordinated planning must be balanced by the need for expediency. We are very concerned that the proposal to vet the CTPG plan (which could not be

completed before completion of the ISO annual plan) through the Strategic Transmission Investment Plan (STIP) could cause delay in the planning process. The transmission planning and permitting process is already complex; adding another regulatory approval to ensure coordinated planning seems unnecessarily burdensome at a time when the state must move with all haste to prioritize, plan, and permit the transmission needed to meet a 33% RPS.

An alternative approach to ensuring coordinated planning might be to establish for the CTPG a Coordinating Committee similar to that established for the RETI process. RETI's Coordinating Committee, comprised of the Energy Commission, the CPUC, the ISO, the Northern California Power Agency, and the Southern California Public Power Authority, has provided guidance as needed to ensure the objective and coordinated nature of RETI's analysis, while remaining relatively detached from the technical details and results of RETI's work. Establishing such a Coordinating Committee to oversee the work of the CTPG might fulfill much of the IEPR's stated intention of coordinated planning.

Nuclear Power Plants

Diablo Canyon Power Plant (DCPP) Units 1 and 2, owned by PG&E, began full power operation in 1985 and 1986, respectively. Current 40-year operation licenses expire in 2024 and 2025, respectively. San Onofre Nuclear Generating Station (SONGS) Units 2 and 3, owned by SCE and SDG&E, began operation in 1983 and 1984, and the current licenses expire in 2022 for both units. Upon application, the Nuclear Regulatory Commission (NRC) is allowing nuclear power plants to extend their operating licenses for an additional 20 years beyond the existing licenses, for a total of 60 years of operation.

The CPUC would like to clarify that the utilities do not file a license extension application with the CPUC, nor does the CPUC approve or disapprove a license extension application filed with the NRC. The studies approved for PG&E and SCE, in D.07-03-044 and D.09-11-011 respectively, are feasibility studies to analyze equipment and operations at the plant, as well as other issues, to determine whether the utilities should apply to the NRC for a 20-year extension of their licenses. Several years later, around 2020, if the utilities decide to go ahead with license extension processes, the utilities would file a formal application with the NRC.

The CPUC has the following comments on the issues raised in the *Draft IEPR* regarding environmentally-related issues and the feasibility studies:

- Seismic vulnerability is a major issue affecting all nuclear power plants in California. PG&E and SCE have extensive experience in studying, analyzing, and reporting the seismic conditions surrounding their plants using 2-D mapping. California Assembly member Blakeslee proposed imposing 3-D mapping as a requirement with his introduction of AB 42 in the California legislature in December 2008. The CPUC opposed various versions of this bill in 2009, on the grounds that 3-D mapping is not cost-effective. This bill was not approved by the end of the legislature's current session. The CPUC believes that 3-D mapping should be a recommendation and not a mandatory requirement in the IEPR.
- The July 2007 magnitude 6.8 earthquake located near Tokyo Electric Power Company's Kashiwazaki-Kariwa nuclear power plant resulted in a shutdown of the plant at a cost of hundreds of millions of dollars per month. It appears appropriate that any implications for DCP and SONGS, as well as any other recently discovered faults in the vicinity of the plants, be addressed.
- Energy Division staff would not oppose including the recommendation that the CPUC assess the need to establish an Independent Safety Committee for SONGS patterned after the one at DCP. When DCP was being constructed in 1981, a major design flaw was discovered, which led to termination of Unit 1's low power license (up to 5% of power). DCP Unit 1 was delayed for an additional 4 years, and was not granted a new full power license until 1985. As a precaution against any further engineering or operational concerns, a 3-member Independent Safety Committee was formed as a condition for granting DCP its operating license. This problem was limited only to DCP. The SONGS units have successfully operated since the mid-1980's without an Independent Safety Committee. The costs for establishing and retaining such a Committee would be borne by ratepayers.
- The CPUC agrees that the issues of: 1) storage and disposal of low level waste; 2) long-term storage of spent nuclear fuel on-site; and 3) that SCE should address the safety culture and the NRC's evaluation of the safety culture for the SONGS units, should be addressed in the license extension feasibility studies.

Other Clarifications

The CPUC seeks clarification on several topics raised in the Draft IEPR:

- When the CEC states that “since AB 32 now encourages deployment of renewables to the extent feasible, it makes sense to limit delays in California’s aging power plant retirement policy to better link to renewable development schedules.” (p. 171), is the CEC recommending that power plant retirements be expedited to accommodate renewable development, or is the intention to do the opposite – limit aging plant retirement schedules to better sync with renewable deployment schedules, rather than building new fossil generation to replace the aging plants that may become redundant with the subsequent addition of renewable capacity?
- The CPUC believes that data centers should be added to the discussion of particularly vulnerable institutions, along with hospitals. (p.99)

Recommended Corrections

The CPUC also offers the following recommended corrections to the Draft IEPR:

- P 9, first sub bullet point under CHP: “The Energy Commission and the ARB should structure CHP programs to ensure development...” Recommend revising to: “The Energy Commission, CPUC, and the ARB should structure CHP programs to ensure development...”
- P 70: The statement, “However, based on the restrictions of AB 1X, the CPUC timetable specifies that residential customers will default to flat prices and have to request time varying prices. In order to guarantee board benefits of time varying pricing, they should be implemented as a default rate and allow individual customers to opt-out if they choose”, should be revised to reflect recently passed legislation, SB 695, which prohibits the CPUC from requiring or permitting an investor-owned utility to default time-varying pricing for residential customers prior to 2013, with certain requirements.
- P 91, last line: “CHP tariff” recommend changing to “feed-in-tariff for small, new, highly efficient CHP”
- P 93: “By far the most important fuel used for CHP is natural gas...” Recommend changing the word “important” in this sentence to “dominant” or similar, more accurate adjective.
- P. 93 “When these guidelines are adopted, they will set a *legislatively mandated minimum efficiency standard of 60%* for CHP facility development and assure that facilities are designed and operated in a way that reduces GHG emissions and will create a new benchmark for CHP efficiencies in California. As CHP technology continues to develop, *even higher efficiencies* can be expected to become standard and cost effective.” (Recommended revisions in *italics*.)
- P 99, 1st bullet: We believe the correct SGIP bill citation is SB 412, not SB 1412.

- P 99: "Basic Large Export Case. The AB 1613 CHP feed-in tariffs when they are finalized, will only apply to systems 20 MW or less." We recommend adding the word "new" before "systems" in this sentence.
- P 176: There seems to be a logical/construction error in the following sentence: "The negative impacts of a fast retirement schedule...allows time for the air credit issues to be resolved."
- P 217: The recommendation that "all customers should have no-cost access to near real-time information about their energy use in a format that is both meaningful and easy to understand" prejudices the earlier statement on p 200 that the energy agencies should review policies depending on customer investments and determine whether new forms of assistance are required. The recommendation should be justified.

Conclusion

We thank the Energy Commission for the opportunity to provide comments on the Draft IEPR. We look forward to continued collaboration with the Energy Commission and its staff in helping address the myriad challenges and opportunities facing California's energy sector today.

Dated October 28, 2009

Respectfully submitted,



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