BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
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In the Matter of:

Rulemaking to Consider Modification of Regulations Establishing a Greenhouse Gases Emission Performance Standard For Baseload Generation of Local Publicly Owned Electric Utilities

Docket No. 12-OIR-1

FINAL CONCLUSIONS

Introduction

In 2007, the California Energy Commission (Energy Commission) adopted a greenhouse gases (GHG) emission performance standard (EPS) and related requirements at California Code of Regulations, title 20, sections 2900 through 2913[1]. The Energy Commission adopted the EPS regulations under the authority of Senate Bill 1368 (Perata, Statutes of 2006, Chapter 598, § 2) (SB 1368). This legislation requires the Energy Commission, in consultation with the California Public Utilities Commission (CPUC) and the California Air Resources Board (ARB) to establish a GHG EPS and implementing regulations for all long-term baseload generation commitments made by local publicly owned electric utilities, also referred to as publicly owned utilities (POUs).[2]

The EPS regulations apply to "covered procurements" entered into by the POUs including ownership interests and contractual arrangements of five years or more. The EPS regulations for POUs establish a minimum performance standard of 1,100 pounds carbon dioxide per megawatt hour (lbs. CO_2/MWh), consistent with the EPS established by the CPUC for investor owned utilities (IOUs). One of the main purposes of the EPS is to reduce California's financial risk exposure of investments in high-GHG emitting power plants to the compliance costs of future GHG emissions regulations (state and federal) and associated future reliability problems in electricity supply.

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1 Unless otherwise specified, all references to regulations in this document refer to title 20 of the California Code of Regulations.

2 SB 1368 (Public Utilities Code, section 8340(a)) defines baseload generation as "electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent."

The Energy Commission opened an Order Instituting Rulemaking (OIR [No. 12-OIR -1]) to consider changes to the EPS regulations in response to a petition by the Natural Resources Defense Council (\) and Sierra Club.

Procedural History

On November 14, 2011, NRDC and Sierra Club submitted a joint petition requesting the Energy Commission revisit the EPS regulations, raising concerns that investments made by POUs in non-EPS compliant facilities had not undergone any review by the Energy Commission as required by SB 1368. Specifically, the petition recommended the Energy Commission open a rulemaking to modify the regulations to require POUs to submit compliance filings for all non-EPS compliant investments and further define what constitutes a covered procurement as used in the regulations.

On December 14, 2011, the Energy Commission granted the NRDC and Sierra Club petition and directed staff to draft an OIR to consider the issues raised in the petition as well as concerns raised by POUs that the Energy Commission is required to re-evaluate the regulations under Public Utilities Code Section 8341(f).

On January 12, 2012, the Energy Commission adopted the OIR to initiate a rulemaking proceeding to consider possible modifications to the EPS. The OIR focuses on whether to:

- Establish a filing requirement for all POU investments in non-EPS compliant facilities regardless of whether the investment could be considered a "covered procurement;"
- Establish criteria for, or further define, the term "covered procurement," including specifying what is meant by "designed and intended to extend the life of one or more generating units by five years or more" and "routine maintenance;"
- Make changes consistent with Public Utilities Code Section 8341, subdivision (f) that requires the Energy Commission to reevaluate and continue, modify, or replace the EPS when an enforceable GHG emissions limit applicable to POUs is established and in operation.
- Make any other changes to carry out the requirements of SB 1368.

On April 18, 2012, the Energy Commission conducted a public workshop regarding the OIR. Workshop participants included representatives from interested organizations such as NRDC and Sierra Club and the various POUs.

On July 9, 2012, Chair and Lead Commissioner Robert Weisenmiller issued Tentative Conclusions and Requests for Additional Information (Tentative Conclusions), asking parties to file comments by July 27, 2012 on the four OIR topics outlined above. In addition, the POUs were asked to provide additional information to allow for a better understanding of how POUs make decisions regarding investments in non-EPS compliant facilities, including procedures and policies for approving expenditures.

On August 31, 2012, Chair and Lead Commissioner Weisenmiller issued a Request for Reply Comments on a limited set of issues in the proceeding related to reporting requirements and possible lowering of the EPS, noting that the Energy Commission had sufficient information in the record on other matters to make final decisions.

On December 20, 2013, Chair and Lead Commissioner Weisenmiller issued a notice of proposed workshop and a request for comments related to reporting requirements under Section 2908.

On January 29, 2013, the Energy Commission conducted a second workshop and subsequently provided an additional opportunity for parties to respond to issues raised in the workshop.

On April 5, 2013, Chair and Lead Commissioner Weisenmiller issued Proposed Final Conclusions that included proposed regulatory language changes. Parties had until April 19, 2013, to file comments on whether the proposed regulatory language changes effectively carry out the stated conclusions outlined in the Proposed Final Conclusions.

Conclusions on OIR Topics

Based on information gathered in the record from the workshops and related comments, the following discussion presents final conclusions on each of the OIR topics.

I. Whether to establish a filing requirement for all POU investments in non-EPS compliant facilities regardless of whether the investment could be considered a covered procurement.

A. Background

NRDC and Sierra Club request in their petition that a filling requirement be established for *all* investments in non-EPS compliant facilities regardless of whether they are covered procurements. Under Section 2908 of the EPS regulations POUs must notify the public, via the Energy Commission, whenever a governing body of a POU will deliberate in public on a *covered procurement.* Within 10 days after a POU enters into a covered procurement it must submit

documentation to the Energy Commission under Sections 2909 and 2910 of the EPS regulations that would allow the Energy Commission to evaluate whether the covered procurement complies with the EPS.[3] Under Section 2907, POUs may request Energy Commission determinations on whether a prospective procurement would extend the life of a power plant by five years or more, constitute routine maintenance, or comply with the EPS.

As NRDC and Sierra Club point out, no POU has submitted a compliance filing or Section 2907 request for determination on investments in non-EPS compliant facilities since the EPS regulations went into effect.[4] They suggest that the absence of these filings signals possible non-compliance with the EPS regulations or a misunderstanding of SB 1368 requirements. Yet, over the course of this rulemaking, neither they nor any other party offer evidence of POU non-compliance.[5] Such evidence is essential to overcome the legal presumption that POU decision-makers regularly perform their official duties under the EPS regulations.[6]

Notwithstanding the statutory presumption that favors POUs, NRDC and Sierra Club reasonably question the transparency of POU decision-making for investments at non-EPS compliant facilities. While the POUs' decision-making processes are consistent with the EPS regulations, they arguably inhibit public scrutiny and review of investment decisions to ensure compliance with SB 1368. Given that ratepayer (and public) protection is an essential feature of SB 1368, it is reasonable and appropriate to require greater transparency regarding POU investments. Thus, the issue is how to achieve greater transparency without imposing onerous financial and administrative burdens on POUs.

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3 A covered procurement is either a new ownership investment in a baseload generation power plant or a particular type of new or renewed POU contract commitment for the procurement of electricity with a term of five or more years. (EPS Regulations, § 2901, subdivision (d).) In turn, a "new ownership investment" includes any investment in an existing, non-deemed compliant power plant owned in whole or in part by a POU that is either (1) designed and intended to extend the life of one or more generating units by five years or more, not including routine maintenance, or (2) results in an increase in the rated capacity of the power plant, not including routine maintenance. (EPS Regulations, § 2901, Subdivision (j).)

4 *Joint Petition of Natural Resources Defense Council and the Sierra Club for Initiation of a Rulemaking Regarding California's Emissions Performance Standard*, November 14, 2011, p. 4.

5 The NRDC and Sierra Club suggest that the Energy Commission might obtain possible evidence or a better understanding of POU practices by requiring POUs to provide data on past, current, and planned investments in non-compliant power plants. However, mere speculation about POU practices is insufficient to justify requiring the requested disclosures. Instead, if anyone has supportable reasons to question POU investments, the appropriate manner of raising these concerns is filing a complaint or request for investigation with the Energy Commission under Section 2911.

6 See: Evidence Code, § 664 [providing that "[i]t is presumed that official duty has been regularly performed"].

The following discusses proposed modifications to the public notice requirement under Section 2908, and the addition of a new annual filing requirement under Section 2908. These proposed modifications will achieve greater transparency without being overly burdensome to POUs.

B. Proposed Modifications to Section 2908 Public Notice

1. Current POU Reporting Practices

The Energy Commission received information from the POUs on their policies, procedures, and reporting practices related to investments in non-EPS compliant facilities to gain a better understanding of POU decision-making processes.[7] From the responses, it became clear that practices for approving covered procurements and other investments in non-EPS compliant facilities, including those for routine maintenance, vary widely among the various POUs. It also became evident, due to the variety of procedures and practices, that implementing a standard reporting requirement for *all* investments in a non-EPS compliant facility would be problematic.

POU practices and procedures for approving covered procurements for non-EPS compliant facilities range from delegation of decision-making authority to staff, to approval of all line item expenditures by governing boards. For example, Modesto-Santa Clara-Redding Public Power Agency (M-S-R) takes all line item expenses for San Juan Generating Station (San Juan), whether they are covered procurements or routine maintenance, to its governing board for approval.[8] In contrast, the Southern California Public Power Authority (SCPPA) staff examines the investment for capital improvements at San Juan to determine whether the investment is a covered procurement. If SCPPA staff determines an investment is clearly routine maintenance it does not require board approval.[9] Where there is a question about whether a particular investment is a covered procurement, SCPPA staff presents the investment to the SCPPA Board of Directors for consideration. In other cases, a dollar threshold is used to determine when or if a particular investment should be taken to a governing board for approval.[10]

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7 *Tentative Conclusions and Request for Additional Information*, Energy Commission, Docket 12-OIR-1, July 9, 2012.

8 M-S-R has a formal process for review and approval of expenditures at San Juan that involves approval of the total annual budget, as well as specific expenditures set forth therein. See: *Joint Comments of SCPPA, M-S-R, and the City of Anaheim in Response to the Tentative Conclusions*, Docket No. 12-OIR-1, July 27, 2012, pp.4-5.

9 Ibid, pp 6-8.

10 In the case of Los Angeles Department of Water & Power (LADWP), under arrangements for purchase of power from the Intermountain Power Project (IPP), the Intermountain Power Service Corporation, as the Operating Agent for the plant, prepares the annual operating and capital budgets, which must then be approved by the IPP Coordinating Committee and the Intermountain Power Agency. Decisions on items under $500,000 are delegated to the Operating Agent. See: *Comments from Los Angeles Department of Water and Power to the Energy Commission's*

For expenditures on routine maintenance, in many cases the operator of the non-EPS compliant facility is responsible for determining what investments are made, consistent with prudent utility practices. Those costs are directly passed on to those POUs holding a contract or ownership share in the facility. The individual POUs may have representatives on the various committees that make decisions on investments, but they are often not the actual operator of the facilities and are, therefore, not the final decision-makers over investments for routine maintenance.[11] POUs note that, due to the sheer volume of instances of routine maintenance that occur each year, requiring POUs to report on all investments for routine maintenance, including those that are typically covered by an operations and maintenance budget, would unduly burden the staffs of POUs and the Energy Commission.

2. Proposed Reporting Options

In considering how to achieve greater transparency without imposing onerous financial and administrative burdens on POUs, Section 2908 of the EPS serves as a useful guide. As previously mentioned, Section 2908 requires POUs to post specified notices in accordance with the Brown Act, whenever their governing bodies will deliberate in public on a covered procurement.[12] Section 2908 also requires POUs make public the information and supporting documents provided to the governing bodies for their deliberations. POUs can satisfy these noticing requirements by providing the Energy Commission with the uniform resource locator (URL) that links to the required information.

NRDC and Sierra Club put forward a proposal in which POUs would provide the Energy Commission with URLs for the agenda and supporting documentation for all expenditures on non-EPS compliant facilities on which POU governing boards deliberate, whether the expenditures are believed to be covered procurements or

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Tentative Conclusions and Request for Additional Information, Docket 12-OIR-01, July 27, 2012, pp. 7-8.

11 For example, SCPPA, as part owner of San Juan, has a representative who sits on the various San Juan committees (including the Engineering and Operating Committee, the Fuels Committee, and the Project Coordinating Committee) that approve capital expenditures for the plant. Under the provision of the San Juan Participation Agreement, the Operating Agent (Public Service of New Mexico) must perform operating work (including maintenance, operating, purchasing, and so forth) in accordance with the Participation Agreement and prudent utility practice. If the Coordination Committee fails to reach agreement on a matter, the Operating Agent is authorized and obligated to conduct work necessary to operate and maintain the facility. Although SCPPA could vote no on a particular capital investment, it would still be required to bear its proportional share of the investments. The same circumstance holds for M-S-R or the City of Anaheim as partial owners of San Juan. See *SCPPA San Juan Participants Comments on Questions in the Notice of Rulemaking Workshop*, Docket 12-OIR-1, March 26, 2012, pp.14-17 and *SCPPA, M-S-R and City of Anaheim Response to Tentative Conclusions*, Docket No. 12-OIR-1, July 27, 2013, pp. 4-10.

12 Government Code, § 54950 et seq.

not.[13] NRDC and Sierra Club also suggest that the Energy Commission ensure that parties on relevant service lists are simultaneously informed of POU activity and that URL links to POU disclosures are posted on a publicly available Energy Commission Website.

NRDC and Sierra Club suggest that the notice is posted as soon as the relevant information is available and with sufficient notice to ensure public stakeholders are able to participate. In the case of agendas and agenda descriptions for public meetings, NRDC and Sierra Club acknowledge that under the Brown Act requirements this may be 72 hours in advance of that meeting, or 24 hours for a special meeting.[14] Under the current regulations, information related to a covered procurement's compliance with the EPS that is distributed to its governing board must also be posted and available. NRDC and Sierra Club recommend going beyond this current requirement to include all documents or information needed to allow for an informed understanding of POU investments in non-EPS compliant plants.

The Energy Commission sought input on several reporting options including the NRDC and Sierra Club proposal and four other options described in Appendix A.[15] Initially, parties disagreed over which of the reporting options were most appropriate. Several of the POUs believed there is no need to change the current reporting requirements because they provided sufficient transparency. The POUs asserted that their ratepayers, who are the primary target audience for information on investments in non-EPS compliant facilities, already have access to agenda items and backup information on the individual POU websites. The POUs, including the Los Angeles Department of Water and Power (LADWP), SCPPA, City of Anaheim, Northern California Power Agency (NCPA), California Municipal Utilities Association (CMUA), and M-S-R argued that the NRDC and Sierra Club reporting proposal would impose significant burdens on POUs and Energy Commission staff.[16] They asserted that it is not clear what would be achieved by the NRDC and Sierra Club proposal that is not already achieved through the existing Brown Act provisions with which they comply.

The POUs also raised questions regarding how the Energy Commission would use the information under any of the reporting options and whether the Energy Commission would be in a "review and approval role" with respect to the

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13 *Joint Comments of the Natural Resources Defense Council (NRDC) and the Sierra Club in response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-01, July 27, 2012, Section 1.

14 Ibid. The NRDC and Sierra Club suggest that in some cases information should be made available sooner than required under the Brown Act, although they do not indentify under what circumstances a shorter notice would be needed.

15 See also: *Notice of Rulemaking Workshop*, Energy Commission, Docket No. 12-OIR-1, December 20, 2012.

16 See the reply comments of LADWP, SCPPA, City of Anaheim, NCPA, CMUA, and M-S-R in Docket No.12-OIR-1, September 28, 2012.

investments being reported by POUs.[17] The POUs' comments expressed strong opposition about having anyone other than their governing boards approve investments in non-EPs compliant facilities or determine whether the investments were covered procurements. Of course, the exception to this would be if a POU files a request for Energy Commission evaluation of a prospective procurement under Section 2907. The Energy Commission clarified that for the purpose of reporting under Section 2908 it would be in a "notification role," rather than a "review and approval role."[18]

Although the POU parties continued to argue that the current filing requirement in the EPS is sufficient, they did propose a compromise in the event the Energy Commission determined additional reporting was necessary.[19] The POUs would provide a URL linked to the agenda of a public meeting at which covered procurements are being deliberated, along with the public meeting materials provided to the POU's governing board, at least three days prior to a meeting, or within 24 hours in instances where a special meeting is called. This was described by the POUs as a variation on Option 2 in Appendix A. NRDC and Sierra Club continued to recommend that the Energy Commission should adopt slightly reworded versions of both Options 2 and 3, which would include an annual prospective filing on expenditures for non-EPS compliant facilities, in addition to a notification requirement.

3. Types of Investments Subject to Reporting Requirements

Despite disagreements on the appropriate reporting mechanism, parties suggested ways that would limit the administrative burdens of any reporting requirement on the POUs and Energy Commission staff. One of these was to identify in the regulations the specific types of investments that would be subject to reporting or noticing requirements. NRDC and Sierra Club clarified that they were most concerned with reporting of investments from the three highest-emitting facilities used by the POUs.[20] With respect to the different reporting options, NRDC and Sierra Club stated, "The intent of each of these options was limited to a very small number of facilities, and likely a small number of investments at those facilities."[21] NRDC and Sierra Club's principle concern is over very large investments that coal facilities will face in the next few years to

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17 *Transcript from January 29, 2013, Energy Commission Workshop*, Docket No. 12-OIR-1, p. 14.

18 *Transcript from January 29, 2013, Energy Commission Workshop*, Docket No. 12-OIR-1, p. 60.

19 *M-S-R, SCPPA, City of Anaheim and LADWP Comments on the January 29, 2013, Workshop*, February 15, 2013, pp 4-7.

20 *Transcript from January 29, 2013, Public Workshop*, Energy Commission, Docket 12-OIR-1, pp. 37-38.

21 Ibid, pp. 37 and 39.

meet new United States Environmental Protection Agency (U.S. EPA) regulations.

With this clarification in mind, the parties began to identify ways of focusing reporting requirements on this narrow set of investments of most concern. The Energy Commission asked parties to address several questions regarding the possible use of the terms "major" and/or "investments to meet environmental or other regulatory requirements" to characterize investments on which POUs would provide notification.[22]

All of the POUs expressed concerns with the proposed use of the term "major" to identify the type of investments on which POUs would report to the Energy Commission, as they believed it to be overly broad, arbitrary, or subjective.[23] The POUs also expressed concerns with the proposed use of the term "investments to meet environmental or other regulatory requirements" because of the multitude of environmental and regulatory requirements at non-EPS compliant facilities. They argue these requirements involve not only air quality and GHG emissions, but California Environmental Quality Act/National Environmental Policy Act, toxics and hazardous substances, water and wastewater, industrial hygiene, and worker safety.[24]

Some areas of agreement began to emerge as parties proposed ways to narrow the terms "major" and "investments to meet environmental and other regulatory requirements," or develop alternative terms. NRDC and Sierra Club and the POUs came very close in suggesting the term "expenditure to meet environmental regulatory requirements, whether or not the utility has determined that the expenditure is a covered procurement."[25] The POUs suggested use of the term "ownership investment over $5 million to meet environmental or regulatory requirements specifically related to emission controls at non-EPS compliant baseload plants."[26] The POUs suggested using a $5 million threshold for the reporting requirement based on the amount of annual capital investments made at San Juan, which have averaged about $90 million per year.[27] As the

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22 *Notice of Rulemaking Workshop*, Energy Commission, Docket No. 12-OIR-1, December 20, 2012.

23 See for example: *M-S-R Public Power Agency Reply Comments to December 20 Workshop Notice*, January 22, 2013, Section C.

24 See for example: *Comments from the Los Angeles Department of Water and Power to the Energy Commission's Request for Written Comments on Filing/Notification Options and Activities Associated with Non-EPS Compliant Facilities,* January 24, 2013, p. 10.

25 See comments from the NRDC and Sierra Club in Docket No. 12-OIR-1 from February 15, 2013 and April 5, 2013.

26 *M-S-R Public Power Agency, Southern California Public Power Authority-San Juan Participants, City of Anaheim, and Los Angeles Department of Water and Power Comments on the January 29, 2013, Workshop*, February 15, 2013. p. 6-7.

27 Ibid., p. 6.

POUs point out, NRDC and Sierra Club in earlier comments had suggested a $50,000 and $250,000 threshold, which would amount to only 0.028 percent of the annual capital expenditure.[28] The $5 million threshold suggested by POUs would amount to roughly 0.56 percent of the annual capital budget.

4. Conclusions

The Energy Commission concludes that changes in the existing noticing and reporting requirements for POUs under the EPS regulations would enhance transparency. The proposed regulatory language changes to Section 2908 are presented in Appendix B. The Energy Commission concludes it is reasonable to establish a filing requirement in which a POU would provide the Energy Commission with a URL link to the agenda of a public meeting at which investments are being deliberated by the governing board and the backup information related to the investments' compliance with EPS. The URL would be provided at least three days prior to the meeting (24 hours if a special meeting is scheduled) and the Energy Commission would be required to post the URL on the Energy Commission's Website.

The Energy Commission concludes that in addition to posting the agenda and back-up information, POUs should provide notice to persons on the Energy Commission's most current master contact list (which will be generated when the rulemaking process nears completion) when the board of the POU will deliberate in public on investments for non-EPS compliant facility. The Energy Commission concludes that this requirement is an appropriate reporting mechanism and provides for notification consistent with the Brown Act.

The Energy Commission concludes that requiring noticing for *all* investments, including all instances of routine maintenance, on non-EPS compliant facilities as proposed by NRDC and Sierra Club would impose a significant burden and go beyond what is necessary and reasonable to ensure POU compliance with SB 1368. As a result, the Energy Commission concludes that the threshold for reporting under Section 2908 should be set at $2.5 million (or about 0.28 percent of annual capital expenditures for the San Juan facilities). The Energy Commission further concludes that the language "investments of $2.5 million or more to meet environmental regulatory requirements at non-EPS compliant facilities" is appropriate language for use in Section 2908. It clearly identifies the types of investments and sets a clear dollar amount that triggers the need for a POU to meet noticing requirements.

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28 *Transcript from January 29, 2013, Public Workshop*, Docket 12-OIR-1, p.56. See also: *Joint Comments of the Natural Resources Defense Council (NRDC) and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, July 27, 2012, Section 1.

C. *Proposed New Annual Reporting Under Section 2908*

NRDC and Sierra Club suggest that POUs provide an annual compliance plan with the Energy Commission for each non-EPS compliant facility, including for investments, capital expenditures, contractual changes, sales of interest or other activity. The Energy Commission notes that the Brown Act provisions on noticing (72 or 24 hours in advance) allow a relatively short amount of time for a party to receive notification about investments in non-EPS compliant facilities. NRDC and Sierra Club state that "advanced notice of contemplated major investments and those intended to meet environmental and/or other regulatory requirements benefits all stakeholders by allowing for sufficient lead time to vet whether the investment is consistent with SB 1368 and avoid improper expectation and 11th hour disputes."[29] NRDC and Sierra Club also suggested that the annual filing include information on unexpected investments made in the previous year that could not reasonably be known at the time the previous years' report was filed.

The POUs argue that an additional reporting requirement under the EPS regulations would be unnecessary and burdensome. However, the Energy Commission believes that an annual reporting requirement can be crafted so it imposes minimal reporting burdens on POUs, especially if POUs continue to aggressively pursue divestiture of non-EPS compliant baseload facilities. The annual reporting requirement the CPUC requires of energy service providers for compliance with SB 1368 serves as a guide.[30] The POUs request that any revisions to new reporting requirements be deemed applicable only to facilities where the ownership interest or contract is for greater than five years from the effective date of the regulatory revision, given what they characterize as the extensive and extraordinary effort they have been making to lawfully and expeditiously divest.[31]

1. Conclusions

In the interest of transparency, the Energy Commission concludes that an additional annual prospective filing requirement would provide interested parties more time to examine and consider investments in non-EPS compliant facilities,

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29 *Sierra Club and NRDC Comments on January 29, 2013, Notice of Rulemaking Workshop*, January 22, 2013, pp. 2-3.

30 The energy service providers, community choice aggregators, and electrical corporations, other than Southern California Edison Company , Pacific Gas and Electric Company (PG&E) and San Diego Gas & Electric Company are required to file an annual letter, due by February 15 of each year, attesting to the CPUC that the financial commitments each entity has entered into during the prior calendar year are in compliance with the EPS. CPUC D-07-039, pp. 167-171.

31 See: *Southern California Public Power Authority-San Juan Participants and City of Anaheim Comments on Proposed Final Conclusions*, April 19, 2013, pp. 13-15. *M-S-R Public Power Agency Comments on the Proposed Final Conclusions*, April, 19, 2013, pp. 9-10. *Comments from the Los Angeles Department of Water and Power (LADWP) to the California Energy Commission's (Energy Commission's, or CEC's) Proposed Final Conclusions*, April 19, 2013, p. 5.

so that when they receive notification under the Brown Act timelines they are prepared to more meaningfully participate in POU deliberations. The proposed regulatory language changes to Section 2908 adding an annual reporting requirement are presented in Appendix B. The annual reporting requirement would provide a description of the investment, what it is intended to do, and the associated costs. The Energy Commission concludes that the benefits of increased transparency from a new annual reporting requirement outweigh the minimal burdens imposed.

In addition, the Energy Commission concludes that it is reasonable to exempt from this requirement any facilities for which a POU has entered into a binding agreement to divest itself within five years; the exemption to remain for as long as the binding agreement is in place or the divestment has been completed. The Energy Commission notes that under this set of circumstances the new annual reporting requirement would become moot. Rather than setting a calendar date for the annual filing requirement, the Energy Commission concludes it is most practical for each POU to submit their annual report within 10 days of their approval of the annual capital budgets for the non-EPS compliant baseload facilities.

II. Whether to establish criteria for, or further define, the terms "covered procurement," including specifying what is meant by "designed and intended to extend the life of one or more generating units by five years or more" and "routine maintenance."

A. Background

In its original petition NRDC and Sierra Club request the Energy Commission further refine or define terms in the EPS regulations to ensure POU investments are consistent with SB 1368. To date, there are no specific recommendations for further refining or defining the phrases "designed and intended to extend the life" or "routine maintenance." Nor is it clear that consideration of any such recommendations would be productive. The Energy Commission determined that absent clear recommendations or guidance for further refining or defining the above terms, or facts establishing POU misapplication of the EPS compliance requirements, there is no basis for modifying these phrases or establishing additional criteria for a covered procurement. The basis for this conclusion is discussed in detail in the Tentative Conclusions from this OIR and the Final Statement of Reasons from the original 2007 rulemaking. [32] The following provides a short summary of those findings and conclusions.

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32 *Tentative Conclusions and Requests for Additional Information*, Energy Commission, Docket No. 12-OIR-1, July 9, 2012, pp. 4-6. See also: *Final Statement of Reasons for Adoption of Regulations Establishing and Implementing a Greenhouse Gases Emission Performance*

The Energy Commission has explained that there is sufficient guidance to regulated entities as to which investments are "designed and intended to extend the life of" a power plant by five years or more in the plain language of regulations, coupled with the opportunity to seek a pre-determination under Section 2907. The Energy Commission determined that further defining this phrase would be fraught with difficulty and a high likelihood of unintended consequences. The Energy Commission further determined that whether the investment would extend the life of a power plant for five years or more was heavily dependent upon the factual circumstances of that investment.

The Energy Commission also made it clear that expenditures for "routine maintenance" do not trigger the EPS regulations and are not considered designed and intended to extend the life of a plant. The Energy Commission contemplated that various, different capital improvements, renovations, or upgrades, may well come within the ambit of routine maintenance. It also made clear that there should be no doubt that activities go beyond routine maintenance when, for instance, they are undertaken solely or principally for compliance with legal or regulatory requirements or to achieve environmental improvements.

It was for these very reasons that the Energy Commission established an adjudicatory proceeding to make such determinations. The Energy Commission provided that if a POU is uncertain if an activity is routine maintenance, it can petition for an Energy Commission determination under Section 2907. Although the EPS regulations give POUs the initial opportunity to determine what activities constitute "routine maintenance" or are "designed and intended to extend the life," the Energy Commission and public may challenge those determinations.[33]

The Energy Commission provides additional clarification regarding the definition of covered procurement in the Tentative Conclusions. NRDC and Sierra Club state that they "support the conclusion that activities undertaken to achieve environmental upgrades or comply with legal mandates are covered procurements."[34] The Energy Commission concludes that NRDC and Sierra Club have incorrectly interpreted the conclusions laid out in the earlier 2007 EPS Rulemaking and the Tentative Conclusions. While the Energy Commission agrees that investments for environmental and regulatory requirements fall outside the exception of "routine maintenance," the Energy Commission does not agree that these investments are therefore "automatically" covered

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Standard for Local Publicly Owned Electric Utilities, Energy Commission, Docket No. 06-OIR-1, August 31, 2007, pp. 16, 17, 233, 26-28, 32, 35, 38-40, 78.

33 Section 2911 of the regulations authorizes the Energy Commission to conduct complaint or investigation proceedings, or both, on its own motion or at anyone's request. To date, the Energy Commission has received no complaint or investigation requests.

34 *Joint Comments of the NRDC and Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, July 27, 2012, at Section 2(a).

procurements, as asserted by NRDC and Sierra Club.[35] To automatically conclude that any investment that goes beyond routine maintenance is a "covered procurement" is inconsistent with the plain meaning of the regulations.

B. Conclusions

Based on the extensive record on this issue, both in the original 2007 proceeding and in this rulemaking, the Energy Commission reiterates its conclusion that developing criteria or further refining or defining the phrases "designed and intended to extend the life" or "routine maintenance" is unnecessary.

III. Whether the Energy Commission must or should make changes consistent with the requirements of Public Utilities Code Section 8341, subdivision (f).

A. Background

The POUs suggest that the implementation of the ARB cap-and-trade program triggers the need to reevaluate the EPS.[36] Public Utilities Code, section 8341, subdivision (f) requires the Energy Commission, in a duly noticed public hearing and in consultation with the CPUC and the ARB, to reevaluate and continue, modify, or replace the GHG EPS when an enforceable GHG emissions limit that is applicable to POUs is established and in operation. As the agency tasked with implementing Assembly Bill 32 (Núñez, Global Warming, Statutes of 2006), the Energy Commission believes that ARB is best able to characterize whether the regulations established thereunder constitute an emissions limit applicable to POUs pursuant to SB 1368. Upon close consideration and in consultation with ARB, the Energy Commission determines that there is currently no GHG emissions limit applicable to POUs.

B. ARB's Input Regarding Section 8341(f)

By statute, the Energy Commission is to undertake a reevaluation of the EPS when an emissions limit applicable to local publicly owned electric utilities is established and operational.[37] The POUs assert that because the ARB's cap-and-trade regulations enforce a GHG emissions limit, the Energy

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35 One more step is required before determining that such an investment constitutes a covered procurement: determining whether the investment is designed and intended to extend the life of the plant by five years or more, increases the rated capacity of the plant, or is designed and intended to convert from non-baseload to baseload generation. Only if the investment meets one of these requirements under the regulations does it then qualify as a "covered procurement."

36 *Southern California Public Power Authority Comment on Order Instituting Rulemaking*, Docket No. 12-OIR-1, January 11, 2012, pp. 1-3.

37 Public Resource Code, § 8341(f).

Commission should terminate the EPS regulations.[38] The Energy Commission consulted the ARB, who has primary responsibility for implementing the cap-and-trade program. The ARB concludes that the EPS is an important part of California's overall approach to reducing GHG emissions and provides an important complement to cap-and-trade.[39] ARB explains:

> ARB is implementing a cap-and-trade program that creates an enforceable economy-wide cap covering approximately 85 percent of California's greenhouse gas emissions. The cap-and-trade program became effective January 1, 2012. The program does not set any specific emissions limit for any single entity, or for any sector nor does the program require specific reductions in emissions from any entity or sector. Instead, it establishes a program-wide limit on aggregate emissions from those covered by the program. This limit on emissions (the cap) and the ability to trade create a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities, including local publicly owned utilities, the flexibility to seek out and implement the lowest-cost options to reduce emissions.
>
> Because the cap-and-trade program does not create an emissions limit applicable to local publicly owned electric utilities, ARB believes the trigger for the Energy Commission to reevaluate the emission performance standard has not been met as a result of ARBs enforceable cap-and-trade regulation.[40]

The ARB provided a number of public documents that demonstrate how the cap-and-trade program is intended to function with an economy-wide cap, rather than establishing limits on specific entities or sectors. For example, the cap is described as a "cap on aggregate emissions," "it applies to all sources combined" and "individual facilities do not have caps."[41] Based on the information provided by the ARB regarding their interpretation of Assembly Bill 32 (Núñez, Global Warming, Statutes of 2006), the Energy Commission agreed in the Tentative

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38 *Southern California Public Power Authority San Juan Participants Comments in Notice of Rulemaking Workshop*, Docket 12-OIR-01, March 26, 2012, pp. 19-22.

39 Email RE: *Docket No. 12-OIR-1 Rulemaking to Consider Modification of Regulations Establishing a Greenhouse Gases Emission Performance Standard For Baseload Generation of Local Publicly Owned Electric Utilities*, from Steven Cliff, ARB, June 28, 2012.

40 Ibid.

41 *ARB Staff Presentation, Public Hearing to Consider the Adoption of a Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols*, Dec 16, 2010. See slide 9. *ARB Staff Presentation, ARB Public Hearing to Consider Adoption of the Proposed California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms Regulation, Including Compliance Offset Protocols*, October 20, 2011. See slide 7.

Conclusions that no "emissions limit" that applies to POUs has been established by the cap-and-trade regulations and that mandatory reevaluation of the EPS regulations is not triggered pursuant to Section 8341(f).

NRDC and Sierra Club believe the EPS is a critical component of California's long-term policy to reduce global warming pollution and should, therefore remain in place indefinitely. In contrast, the POUs urge the Energy Commission to reconsider the conclusion that the ARB cap-and-trade regulations do not establish an emissions limit on POUs that triggers a reevaluation of the EPS. The POUs argue that the ARB information on which the Energy Commission relied for its decision misinterprets the Section 8341(f) phrase, "an enforceable greenhouse gases emissions limit," as meaning an entity-specific limit that would apply to a single local POU.

The POUs assert that ARB's interpretation of the SB 1368 provision is flawed "insomuch as the cap-and-trade program creates an economy-wide cap that includes the POUs at issue, the cap-and-trade program *does* impose a cap on POUs."[42] The POUs further assert, contrary to ARB, that Section 8341(f) does not require the establishment of entity-specific emissions limits that would apply to individual POUs. Instead, they believe it requires a reevaluation of the EPS when "an enforceable greenhouse gas emissions limit" is established that is applicable to "local publicly owned electric utilities" as a group.

C. Conclusions

The Energy Commission concludes that the fundamental question is whether the cap-and-trade program adopted by ARB constitutes a "greenhouse gases emissions limit...applicable to local publicly owned electric utilities" as contemplated under SB 1368. Based on comments received, and giving great weight to the ARB's description of how the cap-and-trade program will function, the Energy Commission concludes that the answer is no. As described by the ARB, the cap-and-trade program does not set any specific limit for any sector, nor does the program require specific reductions in emissions from any entity or sector. The "cap" is the aggregate limit on GHG emissions from covered sources.

The Energy Commission concludes that POUs are not required to comply with a specific GHG emissions limit. Instead, they are given a set number of allowances and if they wish to emit more than what is covered by the allowances, they may purchase additional allowances or offsets enabling them to do so. The plain language of SB 1368 refers to an emissions limit applicable to POUs, which the Energy Commission takes to mean a hard and fast limit that POUs specifically are not allowed to exceed. No party has provided a convincing argument that the legislature intended "greenhouse gases emissions limit...applicable to local publicly owned utilities" to include a flexible cap-and-trade program that focuses on an economy-wide cap instead of individual sector or project-specific limits.

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42 *Joint Parties Response to Tentative Conclusions*, Docket No. 12-OIR-1, July 27, 2012, p. 14.

Therefore, the Energy Commission concludes that Section 8341(f) has not been triggered by implementation of the ARB's cap-and-trade program and the Energy Commission is not required, at this time, to reevaluate the EPS and determine whether to continue, modify, or replace it.

IV. Whether to make any other changes to the EPS regulations to carry out the requirements of SB 1368.

During the EPS rulemaking, the Energy Commission asked parties whether other changes to the EPS regulations should be made. Two potential changes were proposed: revisions to tighten the current EPS level, and changing the language in the exemption provisions in Section 2913. These proposed changes are discussed below.

A. Proposed Revisions to the EPS Level

1. Background

The EPS establishes a minimum performance requirement for any long-term financial commitment for baseload generation that will be supplying power to California ratepayers. SB 1368 is intended to prevent California utilities from making long-term commitments to high-GHG emitting baseload power plants. If entities enter into long-term commitments to high-GHG emitting baseload plants, California ratepayers will be exposed to the high cost of retrofits (or potentially the need to purchase expensive offsets) under future GHG regulations.[43] The California ratepayers will also be exposed to potential supply disruption or reliability concerns when high-GHG emitting facilities are taken off-line for retrofits, or retired early, in order to comply with future regulations.[44]

Although not raised in their original petition or in the Energy Commission's OIR, NRDC and Sierra Club suggested revising the EPS standard for POUs to a level tighter (or lower) than the current 1,100 lbs. CO_2/MWh. In their comments, the NRDC and Sierra Club argue that the analysis they prepared in the federal GHG standard proceeding, which they submitted in this OIR, demonstrates that an EPS of 825 – 850 lbs. CO_2/MWh is feasible and economic today.[45] NRDC and Sierra Club believe the current EPS is not sufficiently stringent to require the use

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43 *Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard*, CPUC Decision 07-01-039, January 25, 2007, p. 3.

44 Ibid.

45 *Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, July 27, 2012, Section 4)a.

of the most efficient and least polluting baseload fossil-fueled technology commercially available today.[46]

2. Basis for the Level of Current EPS

SB 1368 requires the Energy Commission to establish a GHG EPS for POUs at a rate of emissions that is no higher than the rate of GHG emissions for combined cycle natural gas baseload generation. It also requires the Energy Commission set the level of the EPS for POUs consistent with that set by the CPUC for the IOUs. The EPS is currently set at 1,100 lbs. CO_2/MWh, which was based on a review of emissions rates associated with a broad range of natural gas combined cycle power plants in California of varying vintages. It is also based on the extensive record established in the Energy Commission's 2007 rulemaking and the CPUC proceeding.[47]

The EPS standard of 1,100 lbs. CO_2/MWh was developed by the CPUC and Energy Commission to reasonably account for potential outlier facilities from the average data on emissions rates that occur for units using dry cooling technologies, that are smaller-sized facilities, or that are located in the desert or at high altitudes.[48] The current EPS level reflects the intent of the Legislature to base the EPS on representative combined cycle power plants emission rates. It also avoids establishing a performance standard that is representative of the most inefficient, older combined cycle plants currently in operations.[49] The CPUC in its decision concluded that this level is appropriate in light of SB 1368's grandfathering provisions, which reflect the Legislature's concern that some of the older, less efficient combined cycle power plants in operation may not be able to meet the standard.[50]

As noted above, the purpose of SB 1368 is to prevent POUs from making long-term commitments to high-GHG emitting baseload plants. Even NRDC and Sierra Club note that the current 1,100 pound limit has precluded base load generation of electricity for California utilities by combustion of the most polluting forms of fossil fuels—coal and oil—and by the most polluting of the available

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46 Later in the rulemaking the NRDC and Sierra Club suggested that the EPS be lowered to 950 lbs. CO_2/MWh in response to parties' arguments that baseload power plants could not meet the 825 – 850 lbs. CO_2/MWh. See: *Sierra Club and NRDC Comments on Proposed Final Conclusions*, Docket No. 12-OIR-1, April 19, 2013, p. 2.

47 *Interim Opinion on Phase 1 Issues: Greenhouse Gas Emissions Performance Standard*, CPUC Decision 07-01-039, January 25, 2007, pp. 3-4.

48 Ibid., p. 8.

49 Ibid., p. 8.

50 SB 1368 states that all combined cycle natural gas plants that are in operation or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed in compliance with the EPS.

natural gas-based technologies.[51] Its primary intent is not to require new natural gas combined cycle power plants to use the most efficient and least polluting technology that is commercially available, but to prevent POUs from investing in high GHG-emitting facilities. SB 1368 does not require that the EPS be updated to reflect the most current technological advances in highly efficient baseload resources, as suggested by NRDC and the Sierra Club. The Energy Commission believes there are other mechanisms in place to drive new natural gas plants to be highly efficient and less polluting, including both regulatory and market mechanisms.

For example, strong economic incentives have already resulted in utilities investing in new, higher efficiency, baseload natural gas-fired combined cycle plants, because fuel costs make up the largest share of costs for operating these plants.[52] The efficiency of California's natural gas fleet has improved about 22 percent between 2001 and 2012 as newer, more efficient plants are replacing older, inefficient plants, as shown in Table 1 below.[53]

Table 1: California Natural Gas-Fired Heat Rates for 2001–2012 (Btu/kWh)[54]

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Gas	9,997	9,645	9,080	8,726	8,393	8,111	7,890	7,972	7,858	7,596	7,855	7,805

Source: QFER CEC-1304 Power Plant Data Reporting.

A carbon pricing system such as California's cap-and-trade program, along with federal GHG regulations, will provide additional incentives to build highly efficient natural gas plants in the state. The U.S. EPA has initiated a phased process to update and add new rules setting GHG performance standards for new, modified, and existing power plants. The first phase applies to new gas- and coal-fired units that start construction after the rule is published in the Federal Register. The EPA must finalize rules for new units under Section 111(b) of the Clean Air Act no later than June 2015. States would then implement the federal

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51 *Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, July 27, 2012, Section 4)a.

52 For example, the additional fuel and carbon costs over a 10-year period (assuming $4.50 per million British thermal units natural gas and $35/metric ton (MT) carbon with a 70 percent capacity factor) for a 500 megawatt (MW) natural gas combined cycle plant with a heat rate of 9,000 British thermal units per kilowatt hour compared to a plant with a heat rate of 7,000 British thermal units per kilowatt hour would be roughly $390 million.

53 *Staff Paper: Thermal Efficiency of Gas-Fired Generation in California*, Michael Nyberg, Energy Commission, Publication #CEC-200-2011-008, March 2013, p. 1. The table is updated with 2011 and 2012 data from the Quarterly Fuels & Energy Reporting.

54 Annual figures differ from previous staff paper due to the addition of some units not previously reported under Quarterly Fuel and Energy Reporting regulations. California Code of Regulations, Title 20, section 1304(a)(1)-(2).

rules through their new source air permit reviews. Under the second phase, EPA is working with states to develop GHG emission reduction strategies for existing power plants under Section 111(d) of the federal Clean Air Act. Rules for existing power plants would be published and implemented by states over the next two years.

3. SB 1368 is Successfully Accomplishing its Purposes

One of the primary goals of SB 1368 is to encourage POU divestiture of non-EPS compliant facilities. The IOUs under the CPUC's jurisdiction have already divested themselves of non-EPS compliant facilities. Since this OIR was opened in 2012, POUs have made significant progress in divesting themselves of ownership or contractual arrangements for non-EPS compliant facilities. By divesting early, California utilities will forgo the high costs and GHG emissions associated with baseload coal facilities that will require potentially very large investments to comply with environmental regulations.

LADWP is taking actions that will result in divestiture of its two non-EPS compliant power plants: Navajo by 2015 and the Intermountain Power Project (IPP) by 2027. As LADWP notes, their 2012 Resource Plan lays out the foundation for their exit out of coal resources and identifies the types of replacement resources that will be needed.[55] For example, to replace Navajo, LADWP issued a Request for Proposal (RFP) in 2011 for natural gas combined cycle and combustion turbines. In addition, LADWP has approved two very large-scale solar transactions totaling 460 MW and a local renewable feed-in tariff to supply 100 MW of generation. These resources along with additional energy efficiency spending will mean that LADWP is on track to have the necessary resources in place for their 2015 exit from Navajo. In addition, LADWP, along with the other participants in IPP, are taking actions necessary to transition IPP from coal to natural gas, which would make it an SB 1368 compliant facility.[56] Negotiations are underway on a new power purchase agreement to establish a firm conversion date that will be no later than 2027; LADWP hopes the conversion will be sooner.[57]

SCPPA San Juan Participants and City of Anaheim,[58] along with M-S-R,[59] are in negotiations to develop an alternative plan to the Federal Implementation Plan

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55 *Transcript of January 29, 2013, Public Workshop*, Docket No. 12-OIR-1, pp. 22-23.

56 Ibid., pp. 24-25. As of January, 2012, LADWP and the other participants in IPP completed the first two steps of a complex eight-step process to transition IPP from coal: 1) amending Utah state law to allow non-coal generation at IPP; and 2) amending the Intermountain Power Agency Organization Agreement.

57 *2012 Power Integrated Resource Plan: Executive Summary*, LADWP, December 2012, p. ES-29.

58 SCPPA San Juan participants in San Juan Unit 3 include: Imperial Irrigation District and the cities of Azusa, Banning, Colton, and Glendale.

59 M-S-R and City of Anaheim hold ownership interests in San Juan Unit 4.

for the San Juan.[60] A settlement involving the Operating Agent, Public Service Company of New Mexico (PNM), the New Mexico Environmental Department, and the U.S. EPA, is a pre-requisite for POUs participating in San Juan to divest their interest by the end of 2017.[61] The POUs are pursuing divestiture of San Juan not only to comply with SB 1368, but also because of the economics of the plant vis-à-vis comparable baseload resources.[62] The negotiations regarding the future of San Juan, including adjusting the ownership interests, are confidential. However, the PNM filed an application (and supporting testimony) at the New Mexico Public Regulation Commission in December 2013 to request approval of changes in the operation of San Juan including the retirement of Units 2 and 3. It states, "Four entities that are participating in San Juan Units 3 & 4 (City of Anaheim, Southern California Public Power Authority, M-S-R Public Power Agency and one other owner) have indicated their desire to exit from active participation in San Juan."[63]

4. Consistency with the CPUC's EPS

SB 1368 requires the Energy Commission to establish an EPS for POUs that is consistent with the standard adopted by the CPUC for load serving entities.[64] Several parties, including CMUA and a number of POUs, argued that the Energy Commission should only take action to lower the EPS in cooperation with the CPUC, as also required by SB 1368. NRDC and Sierra Club acknowledge that the CPUC and Energy Commission must jointly take action to tighten or lower the EPS.[65] After consultation with the CPUC, the Energy Commission, as well as the CPUC, concludes that lowering the EPS for POUs at this time is not contemplated and would provide little if any benefit.[66] More importantly, the Energy Commission concludes that absent action by the CPUC to lower the EPS for the IOUs, there is no sound legal basis on which the Energy Commission can rely to independently lower the EPS for POUs.

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60 In the absence of an alternative plan, EPA has ordered the installation of selective catalytic reduction technology at San Juan Generating Station that could cost up to $1 billion. See: *Transcript of January 29, 2013 Public Workshop*, Docket No. 12-OIR-1, pp. 26-27.

61 *Transcript of January 29, 2013 Public Workshop*, Docket No. 12-OIR-1, pp. 26-29. See also: http://finance.yahoo.com/news/pnm-files-mexico-prc-approvals-230000972.html.

62 Ibid.

63 Direct Testimony and Exhibits of Ronald N. Darnell in the Matter of the Application of Public Service Company of New Mexico for Approval to Abandon San Juan Generating Station Units 2 and 3 Before the New Mexico Public Regulation Commission, PNM, December 20, 2013, p. 29.

64 Public Utilities Code, §8341(g).

65 *Joint Comments of the Natural Resources Defense Council and the Sierra Club in Response to the Energy Commission's Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, July 27, 2012, Section 4)a.

66 Letter from Michael R. Peevey, President, California Public Utiltiies Commission to Robert B. Weisenmiller, Ph.D., Chair, California Energy Commission, March 4, 2014.

5. Ability to Meet a Tighter EPS

The Energy Commission gave parties an opportunity to respond to the NRDC and Sierra Club proposal to lower the EPS to 825 – 850 lbs. CO_2/MWh and the technical information they submitted on this subject. In addition, given that the EPS applies only to power plants that are designed and intended to operate as baseload facilities, the Energy Commission sought input from the POUs on how many of California's baseload natural gas power plants would be affected by a lower EPS. Several POUs, including Northern California Power Agency (NCPA), Turlock Irrigation District (TID), Santa Clara, Redding, and Pasadena note that a number of their plants, even highly efficient plants added in the last few years, would barely, if at all, be able to meet NRDC and Sierra Club's proposed EPS.

NCPA states that it "does not believe that any of the natural gas fired power plants operated by it or its member agencies would meet the lower EPS suggested by NRDC and Sierra Club."[67] The NCPA further indicates that even the Lodi Energy Center, which was dedicated in August 2012, employing the latest state of the art emission reduction and efficiencies operation would barely meet the minimum threshold proposed by NRDC and Sierra Club.[68] TID notes that despite "being a relatively new and highly efficient natural gas combined cycle plant, the Walnut Energy Center would not likely meet the newly proposed, drastic change to the EPS."[69] Redding notes that its "combined-cycle operations currently meet the 1,100 lbs. CO_2/MWh requirements, but would not be able to meet an 850 pounds per megawatt hour threshold proposed by NRDC and Sierra Club."[70]

All of the POUs providing comments, including SCPPA, Anaheim, M-S-R, LADWP, NCPA, CMUA, TID, Modesto Irrigation District, Imperial Irrigation District (IID), City of Santa Clara, Redding Electric Utility, and Pasadena Water and Power Department, opposed lowering the EPS to the level proposed by NRDC and Sierra Club. In addition, IOUs, including Pacific Gas and Electric (PG&E), and Southern California Edison Company, as well as the Independent Energy Producers (IEP), opposed lowering the EPS. Many parties believed that the NRDC and Sierra Club proposed EPS was overly optimistic and unworkable. For example, NCPA noted, "An EPS in the range suggested by NRDC and Sierra Club would adversely impact a significant portion of the state's electricity supply."[71] LADWP stated that the "suggested standard is impractical and presents

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67 Ibid, p.8.

68 Ibid, p.9.

69 *Reply Comments of TID*, Docket No. 12-OIR-1, September 28, 2012, p.2.

70 *Redding Electric Utility Reply Comments on Revising the Current Emission Performance Standard*, Docket No. 12-OIR-1, September 28, 2012, p. 2.

71 *Reply Comments of the NCPA in Response to August 31, 2012, Request for Reply Comments*, Docket No. 12-OIR-1, September 28, 2012, p.9.

unmanageable risks of either stranding clean and reliable natural gas generation or requiring utilities to procure excess generation."[72] M-S-R characterizes the proposed lower EPS as "a virtually unattainable level."[73]

The Energy Commission reviewed the data provided by NRDC and Sierra Club to support their claim that most of the power plants built in California since the inception of the EPS would meet their proposed lower EPS. The Energy Commission concludes that the data shows that most natural gas plants would not meet the lower EPS. As IEP notes "it is apparent that only two of the 10 California facilities cited in their table (in the net representative rate column) actually meet the lower EPS they are proposing. In fact, the other eight facilities that are listed would not be in compliance if the proposed emissions performance standard were in place today."[74]

In addition, the Energy Commission notes that NRDC and Sierra Club relied on a national database to support their recommended EPS level. Although this data includes selective catalytic reduction in some cases, it does not account for corresponding allowable emission of nitrogen oxide and ammonia slip, which apply in California. The Energy Commission sought input on this and any other adjustments that might be necessary to reflect California specific conditions that would mean higher GHG emission rates. Several parties, including LADWP, NCPA, SCPPA, and Anaheim, all responded that national data would need to be adjusted (upward) to reflect California-specific conditions such as environmental regulations and operation in high altitudes or in desert climates.

The Energy Commission concludes that the information provided by NRDC and Sierra Club does not support their assertions that most of the plants built in California since the effective date of the EPS could meet a level of 825 to 850 lbs. CO_2/MWh. Consequently, the Energy Commission concludes that there is not sufficient factual basis for lowering the EPS for POUs at this time. With the limited number of expected future baseload powerplants that would be subject to the EPS, and considering the other policies and mechanisms in place to reduce GHG emissions, it would make little sense for the Energy Commission and CPUC to undertake the substantial effort that would be necessary to develop a full record for lowering the EPS.

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72 *Reply Comments of LADWP to the California Energy Commission's Tentative Conclusions*, Docket No. 12-OIR-1, September 28, 2012, p.3.

73 *M-S-R Public Power Agency Reply Comments*, Docket No. 12-OIR-1, September 28, 2012, p. 2.

74 *Reply Comment of the Independent Energy Producers Association to Consider Possible Modifications to the Emissions Performance Standard,* Docket No.12-OIR-1, September 28, 2012, p. 5-6.

6. Potential Impact of Lower EPS on Needed Operational Flexibility

The Energy Commission is concerned that lowering the EPS for the POUs at this time could have unintended consequences that may hinder, rather than advance, achieving the state's GHG emission reduction goals. The Renewables Portfolio Standard is a central and extremely important part of the overall strategy to meet the state's GHG reduction goals and features prominently in the AB 32 Scoping Plan. Operational flexibility is essential to integrate renewables into the resource portfolios of the state's utilities. This operational flexibility, a product of changes in engineering and design, comes at the expense of thermal efficiency, even when plants are operating at full load. State policy supports a combination of demand response, storage technologies, and flexible natural gas-fired generation to integrate renewable resources.

A danger inherent in setting a substantially lower EPS is that it could preclude needed flexible natural gas baseload generation. Natural gas combined cycle plants will need to be cycled more frequently, which entails lower efficiencies and fast ramp capabilities, and thereby an increase in GHG emissions. The natural gas combined cycle plants built to date in California were expected to start up once or twice per week and operate at efficient (or high) levels of output for long periods. Some natural gas-fired power plants in California are already requesting changes in their permits to allow more frequent starts and stops.[75] Newer natural gas combined cycle plants are designed to cycle on and off daily and ramp over wide ranges of output, which is increasingly necessary especially during nonsummer months to accommodate expected solar penetration at levels anticipated by 2020. For example, the Huntington Beach Energy Project anticipates cycling on and off up to twice a day and its permitted operation at a capacity factor in excess of 78 percent yields a carbon emission factor of 1,054 lbs. CO_2/MWh, just under the state's EPS of 1,100 lbs. CO_2/MWh.[76]

All of the POUs providing comments, as well as IEP, PG&E and Calpine, are concerned that changes in operation of natural gas plants for firming and shaping of renewable resources or for flexible delivery of electricity (ramping units up and down) would necessarily increase a facility's emissions and likely cause plants to exceed the lower EPS proposed by NRDC and Sierra Club. As parties point out, the exact amount of flexible natural gas resources that will be necessary to deal with increasing amounts of renewable resources is yet unknown. The Energy Commission concludes that taking actions to lower the EPS for POUs at this time could result in system inefficiencies. The tradeoff between fast start capability and efficiency means that a lower EPS could preclude a new powerplant with fast

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75 The King City 50 MW natural gas-fired emergency peaker plant that came on-line in 2002 and the Orange Grove 95 MW natural gas-fired simple cycle plant that came on-line in 2010 are seeking substantive changes to their permits to allow more start-ups and shut-downs.

76 *Application for Certification for Huntington Beach Energy Project*, AES Southland, LLC., June 27, 2012.

start capability, even though the new plant coming on line would reduce overall system efficiency, and thereby reduce GHG emissions.

7. Conclusions

The Energy Commission concludes that the current EPS for POUs should not be lowered at this time for several reasons. The EPS has been successful in achieving its original purpose of preventing new long-term investments by California utilities in high-emitting baseload resources, such as coal facilities. In addition, it has encouraged the early divestiture of existing high-GHG emitting baseload resources, as POUs actively pursue early divestiture of their contracts or ownership of these facilities.

NRDC and Sierra Club argue that the EPS should be tightened (or lowered) to require the use of the most efficient and least polluting base-load fossil-fueled technology available today. The Energy Commission notes that baseload natural gas facilities in California are already some of the cleanest in the country.[77] Additionally, overall electricity system efficiency in California has improved consistently over the last few years as new more efficient natural gas-fired power plants have been constructed to replace older, inefficient and higher emitting power plants. The Energy Commission concludes that there are other strategies such as market mechanisms (including cap-and-trade), clean energy policies and incentives, and carbon regulations to drive investments in the most highly efficient, least polluting natural gas-fired baseload generation in California.

SB 1368 is clear that the EPS adopted by the Energy Commission for POUs must be consistent with that adopted by the CPUC for IOUs. The Energy Commission concludes, after consultation with the CPUC, that there currently is no need to lower the EPS and the CPUC does not anticipate taking up the issue. Absent action by the CPUC to lower the EPS for IOUs, the Energy Commission concludes there is no sound legal basis on which the Energy Commission can rely to lower the EPS for POUs.

Finally, the Energy Commission is concerned that lowering the EPS at this time might impede California utilities' ability to provide the operational flexibility necessary to cost-effectively integrate renewables resources. If the EPS standard is set so low that it precludes powerplants with fast start capabilities, which are inherently less efficient, carbon emissions could increase. This could happen despite the fact that the new powerplant would result in improvements in overall system efficiency. The Energy Commission concludes that taking action to lower the EPS for POUs is premature until the state's POUs gains more experience integrating higher levels of renewables. Therefore, the Energy Commission will not lower the EPS for POUs at this time. Should it become necessary to tighten the EPS at some point in the future, the Energy Commission, along with the CPUC, can revisit the issue at that time.

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77 See http://www.power-eng.com/articles/print/volume-117/issue-12/features/2012-operating-performance.html.

B. Proposed Changes to Exemption Provisions

A final issue raised in this rulemaking was the request by SCPPA to revise Section 2913 to replace the term "covered procurements" with "investments." Section 2913 provides for a case-by-case review by the Energy Commission to exempt from the regulations covered procurements that are required under the terms of a contract or ownership agreement, for which the agreement does not afford the POU an opportunity to avoid making the covered procurement. The POUs believe that such a revision is supported by sound public policy and administrative ease, without changing the substantive provisions affecting the underlying qualification for the limited exemption.[78] They further argue that it would result in administrative efficiencies for both the POUs and the Energy Commission since the POUs could utilize the provisions of the section without having to undertake deliberations regarding whether an investment is a covered procurement and the Energy Commission would not have to make a determination on whether the investment is a covered procurement.

NRDC and Sierra Club objected to any change to Section 2913 because of concerns that the change could be used to game the regulation and its effectiveness.[79] They argue that broadening the exemption to cover "investments" that may or may not be "covered procurements" might allow a POU to seek an exemption for an investment that they had not used their full legal and contractual rights to block since they would not have been required to determine, or seek guidance, as to whether the investment was in fact a covered procurement, and therefore precluded.

Regardless of what term is used, the Energy Commission notes that a POU requesting exemption under this provision must show (1) that the investment is required under the terms of the contract or ownership agreement, and (2) the contract or ownership agreement does not afford the POU applying for the exemption the opportunity to avoid making the investment. In evaluating whether these two criteria are met, where several California POUs are involved in the subject investment, the Energy Commission will need to consider to what extent the votes of these other California POUs would afford the POU requesting exemption the ability to avoid the investment.

In other words, if the voting shares of all the California POUs involved in the investment were enough to stop the investment if all California POUs voted against it, then an exemption under Section 2913 would not be warranted. This is because the POUs, acting together and in accordance with SB 1368, could indeed avoid the investment and, thus, would be obligated to do so. The Energy Commission believes that SB 1368 obligates California POUs to vote against

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78 *M-S-R Power Agency, SCPPA San Juan Participants, City of Anaheim, and LADWP Comments on the January 29, 2013, Workshop*, Docket No. 12-OIR-1, February 15, 2013, p. 12.

79 *Sierra Club and NRDC Reply Comments on January 29, 2013, Notice of Rulemaking Workshop*, Docket No. 12-OIR-1, February 15, 2013, pp. 2-3.

investments that would violate SB 1368, whether or not that vote, on its own, would be sufficient to block the investment. Nevertheless, an evaluation of whether or not a POU could have avoided an investment is not dependent upon whether the investment is labeled an investment or a covered procurement. With this clarification, NRDC and Sierra Club agreed that replacing the term "covered procurement" with "investment" should not affect the requirement that all parties do everything within their power to avoid life extending investments in non-EPS compliant facilities. [80]

1. Conclusions

The Energy Commission concludes that changing the term "covered procurement" to "investment" for the purposes of Section 2913 of the EPS regulations is reasonable.

Next Steps

The Energy Commission will issue a Notice of Proposed Action and an Initial Statement of Reason shortly to begin the formal rulemaking process required to officially adopt the regulatory changes proposed in this document.

Dated: March 19, 2014, at Sacramento, California.

ROBERT B. WEISENMILLER
Chair and Lead Commissioner
12-OIR-01 Rulemaking

80 Ibid.

Appendix A – Reporting Options

Option 1: This option would entail a POU providing a URL linked to the agenda for the public meeting of the POU at which any investment in a non-EPS compliant plant is being deliberated in advance of each business meeting. The URL would be provided no later than three days prior to the meeting and would be posted on the Energy Commission's website. This option would not require the Energy Commission to post backup information on its website, nor would it distribute the URL and backup information to a listserver.

Option 2: This option would be an expansion of the existing public notice requirements for covered procurements (in Section 2908 of the regulations) to include "major" investments or "investments to meet environmental or other regulatory requirements." This would require a POU to provide a URL that links to the agenda of the public meeting at which investments are being deliberated and the backup information related to the investments' compliance with EPS. The URL would be provided at least three days prior to the meeting and would require the Energy Commission to post the URL and backup information on the Energy Commission's website and notify the listserver.

Option 3: This option would have a POU provide an annual filing that prospectively identifies "major" investments in non-EPS compliant facilities and/or "investments to meet environmental or other regulatory requirements," for the upcoming year. The filing would contain a description of the investment and what it is intended to do, the costs, and an indication of when a decision to move forward is expected. This annual filing would supplement the existing filing requirement under Section 2909 of the regulations.

Option 4: This option would entail a POU providing an annual filing (similar to what the CPUC requires of LSEs) that contains a description of the investment, what it was intended to do and the costs, along with an attestation that the financial commitments entered into during the prior calendar year are in compliance with the EPS. The investments reported to the Energy Commission could be defined as a "covered procurement" or could also include "major" investments or "investments to meet environmental or other regulatory requirements." This annual filing would replace the existing filing requirement.

Appendix B – Proposed Statutory Language

MODIFICATION OF REGULATIONS ESTABLISHING A GREENHOUSE GASES EMISSION PERFORMANCE STANDARD FOR BASELOAD GENERATION OF LOCAL PUBLICLY OWNED ELECTRIC UTILITIES

Chapter 11. Greenhouse Gases Emission Performance Standard

Article 1. Provisions Applicable to Powerplants 10 MW and Larger

§2901 Definitions

(i) "Local publicly owned electric utility" or "POU" means a "local publicly owned electric utility" as defined in Public Utilities Code Section ~~9604~~ 224.3.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Sections 224.3, 8340 and 8341, Public Utilities Code.

§ 2908 Public Notice

(a) The Energy Commission shall create, maintain, and make available on its website a master contact list containing the names and e-mail addresses of all persons who have requested to be notified when a POU issues a notice pursuant to subdivision (b).

(b) Each local publicly owned electric utility shall post notice in accordance with Government Code Section 54950 et seq. whenever its governing body will deliberate in public on a covered procurement or any investment of $2.5 million or more to meet environmental regulatory requirements at a non-EPS compliant baseload facility.

~~(a)~~ (1) At the posting of the notice of a public meeting to consider a covered procurement or any investment of $2.5 million or more to meet environmental regulatory requirements at a non-EPS compliant baseload facility, the local publicly owned electric utility shall notify the Commission and all persons on the Commission's master contact list for notification of POU investments of the date, time and location of the meeting so the Commission may post the information on its website. This requirement is satisfied if the local publicly owned electric utility provides the Commission and all persons on the Commission's master contact list for notification of POU investments with the uniform resource locator (URL) that links to this information.

~~(b)~~ (2) Upon distribution to its governing body of information related to a covered procurement's compliance with the EPS or any investment of $2.5 million or more to meet environmental regulatory requirements at a non-EPS compliant baseload facility, for its consideration at a noticed public meeting, the local publicly owned electric utility shall make such information available to the public, shall provide an electronic copy to all persons on the Commission's master contact list established pursuant to subdivision (a), and shall provide the Commission with an electronic copy

of the document for posting on the Commission's website. This requirement is satisfied if the local publicly owned electric utility provides the Commission and all persons on the Commission's master contact list for notification of POU investments with the URL that links to the documents or information regarding other manners of access to the documents.

~~(c)~~ (3)For a covered procurement involving a new or renewed contract with a term of five years or more, the documentation made publicly available at the time of posting pursuant to Subsections (~~a~~1) and (~~b~~2) shall include at a minimum:

~~(1)~~ (A) A description of the terms of the contract and option(s) to extend the contract;

~~(2)~~ (B) A description and identification of the powerplant(s) providing energy under the contract, including, but not limited to, power generation equipment and fuel type;

~~(3)~~ (C) A description of the design or operation of the powerplant(s) so as to indicate whether or not the powerplant(s) operates to supply baseload generation;

~~(4)~~ (D) An explanation as to how the contract is compliant with the EPS; and

~~(5)~~ (E) Supporting documents or information that allow for assessment of compliance with the standard, including, but not limited to, staff assessments and reports to the local publicly owned electric utility's governing body, planned or historical production and fuel use data, and applicable historical continuous emissions monitoring data.

~~(d)~~ (4) For a covered procurement involving a new ownership investment, the documentation made available at the time of posting pursuant to Subsections (~~a~~1) and (~~b~~2) shall include at a minimum:

~~(1)~~ (A) For new construction or purchase of an existing generating unit or powerplant, a description and identification of the planned powerplant or the purchased asset specifying the power generating equipment, power source, such as fuel type, wind, or biomass, all supplemental fuel sources, and all available historical production and fuel use data;

~~(2)~~ (B) For an incremental investment that is a covered procurement as defined in Section 2901(d), a description of the modifications to the unit(s) and their impact on generation capacity, carbon dioxide emissions, and planned operation.

~~(3)~~ (C)For non-renewable resources, the heat rate or carbon dioxide emissions profile of the powerplant and the source of this information.

(c) Except as provided below, each local publicly owned electric utility shall file annually a notice identifying all investments of $2.5 million or more that it anticipates making in the subsequent 12 months on non-EPS compliant baseload facilities to comply with environmental regulatory requirements. The filing shall contain a description of the investment and its intended purpose, the associated costs, and an indication of when a decision to move forward is expected. The filing shall also include any such investments made in the previous 12 month period that were not identified in the previous annual notice. The filing shall be made within 10 days of the local publicly owned utility's approval of the annual budget for the non-EPS compliant baseload facility.

(d) A local publicly owned electric utility that has entered into a binding agreement to divest itself of any non-EPS compliant baseload facility within 5 years is exempted from compliance with subsection (b) for that facility for as long as the binding

agreement is in place or until such time that it has completed divestment of the facility.

(e) Investments of $2.5 million or more to meet environmental regulatory requirements at a non-EPS compliant baseload facility that are not also covered procurements are not subject to the compliance filing requirement under Section 2909 or compliance review under Section 2910.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code; Section 54950, Government Code.

§ 2913 Case-by-Case Review for Pre-existing Multi-Party Commitments

(a) A local publicly owned electric utility may petition the Commission for an exemption from application of this chapter for investments ~~covered procurements~~ required under the terms of a contract or ownership agreement that was in place January 1, 2007. The Commission may exempt investments ~~covered procurements~~ from application of this chapter if the local publicly owned electric utility demonstrates that:

(1) the investments ~~covered procurements~~ are required under the terms of the contract or ownership agreement; and

(2) the contract or ownership agreement does not afford the local publicly owned electric utility applying for the exemption the opportunity to avoid making such investments ~~covered procurements~~.

NOTE: Authority cited: Sections 25213 and 25218(e), Public Resources Code; Section 8341, Public Utilities Code. Reference: Section 8341, Public Utilities Code.