SOUTHERN CALIFORNIA EDISON
An *EDISON INTERNATIONAL* Company

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California Energy Commission
Docket Office, MS-4
Re: Docket No. 13-IEP-1A
1516 Ninth Street
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Re: *Southern California Edison Company's (SCE's) Comments on the* California Energy Commission's *Docket No. 13-IEP-1A Final 2013 IEPR*

To Whom It May Concern:

Southern California Edison (SCE) appreciates the opportunity to provide comments on the California Energy Commission's (Energy Commission's) 2013 Integrated Energy Policy Report (IEPR): Final Lead Commissioner Report (Final Report). SCE commends the Energy Commission staff for their tremendous efforts in completing the IEPR Final Report, and believes that the IEPR will help to shape key energy and environmental policy issues that will guide California to a cleaner energy future.

SCE would also like to acknowledge the Energy Commission staff for coordinating with SCE throughout the 2013 IEPR process. SCE appreciates the Energy Commission's incorporation of many of SCE's suggested revisions outlined in its comments on the 2013 Draft IEPR[1]. Though generally very supportive of the recommendations outlined in the IEPR Final Report, SCE would like to offer additional suggestions and clarifications on several topics. SCE respectfully submits the following recommendations to the Energy Commission on the IEPR Final Report:

Chapter 1 – Energy Efficiency

SCE has been coordinating closely with the Energy Commission and utilities on Energy Efficiency (EE) standards, and looks forward to continuing its collaboration with stakeholders as the development and implementation of EE standards progresses. Notably, SCE has been coordinating with Energy Commission staff and stakeholders to develop a definition for Zero Net Energy (ZNE) building codes that can be agreed upon by a broad base of stakeholders. SCE previously filed joint comments with fellow-Investor Owned Utilities (IOUs) Pacific Gas &

[1] See Southern California Edison Comments on Draft 2013 IEPR: http://www.energy.ca.gov/2013_energypolicy/documents/2013-10-15_workshop/comments/Southern_California_Edisons_Comments_2013-10-29_TN-72296.pdf

Electric and Sempra Energy (together, the Joint IOUs) recommending revisions to the CPUC-proposed definition of ZNE. SCE appreciates the Energy Commission's consideration of the IOUs' suggested revisions to the definition of ZNE. SCE additionally offers the following recommendations.

One of the key issues that SCE has articulated in both written and oral public comments (both individually[2], as well as jointly with other IOUs[3]) is the need for flexibility in the definition of ZNE. SCE believes that a workable ZNE definition requires a greater level of flexibility than that which has been articulated in the Final Report.

SCE also believes that the exception for "development entitlements" for offsite Distributed Generation (DG) could be viable for single family developments, but will likely not be available for multifamily or commercial building developments. SCE recommends that the Energy Commission develop other exceptions applicable to such developments so that ZNE can be achievable for those projects. SCE looks forward to continuing to work with the Energy Commission to address these and other issues through the development of further exceptions that can support achieving the state's ZNE goals.

Additionally, as noted in SCE's and the Joint IOUs' comments, Time-Dependent Valuation (TDV) is critical to the accurate valuation of DG. Updating TDV later, as the Final Report suggests, could cause the value of DG to be overstated because TDV is presently designed to value consumption, not generation. The Energy Commission should make the accurate valuation of DG in TDV a priority before DG is considered as a code measure and before ZNE goal dates. To that end, the Energy Commission should involve the California Independent System Operator (CAISO) in ZNE discussions, including those identified on pages 25-26 of the Final Report. Further, the Energy Commission should recommend in this chapter of the Final Report that ZNE's grid impacts be identified and quantified.

SCE looks forward to continuing its coordination with the Energy Commission, agencies, and other stakeholders on ZNE efforts as these codes are further developed, refined and implemented.

Chapter 2 – Demand Response

SCE supports the Energy Commission's efforts to promote Demand Response (DR) and believes that DR—along with other preferred resources[4]—is a crucial component for leading California to a cleaner energy future. To that end, SCE has been coordinating closely with agencies, vendors, non-governmental organizations (NGOs) and other stakeholders to move forward with its Preferred Resources Pilot ("Pilot," also previously referred to as the "Living

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2 *See* SCE Zero Net Energy Presentation: http://www.energy.ca.gov/2013_energypolicy/documents/2013-07-18_workshop/presentations/03_Alvarez_SCE_Presentation_IEPR_Workshop_ZNE.pdf

3 *See* Joint Utility Comments on Zero Net Energy Workshop: http://www.energy.ca.gov/2013_energypolicy/documents/2013-07-18_workshop/comments/PGandE-SCE-SCGC_and_SDGandE%20Joint_Comments_08-01-13_TN-71784.pdf

4 Preferred Resources include Energy Efficiency, Demand Response, and Distributed Generation technologies.

Pilot"), which explores the ability of preferred resources and energy storage to meet local reliability needs in the area of SCE's service territory most affected by the recent San Onofre Nuclear Generating Station (SONGS) shutdown.

SCE appreciates the inclusion of the Pilot in the Final Report, but offers suggested revisions to the paragraph 2 on page 45 of the Final Report to provide greater clarity on the scope and purpose of the Pilot. Specifically, SCE recommends broadening the description of the Pilot to include "preferred resources," as opposed to the more narrow reference to efficiency and DR resources, as well as storage and other advanced technologies.

SCE looks forward to continuing to collaborate with the Energy Commission, agencies, and other stakeholders in moving forward with the Pilot, and assessing the ability of Preferred Resources to meet local reliability needs. SCE believes that these efforts will help to inform future California energy policy and planning efforts on DR and other Preferred Resources.

In addition to comments on the Pilot, SCE offers suggested edits to page 1 and to pages 38, 42, and 44-46 of Chapter 2 – Demand Response in Appendix A to these comments.

Chapter 3 – Bioenergy Status and Issues

SCE appreciates the Energy Commission's revisions and incorporation of SCE's comments on Bioenergy Status and Issues. In particular, SCE agrees that "[t]he limited resource potential for biomass indicates that bioenergy policy going forward must recognize the limits to energy production from this resource. Prudent bioenergy policy must take a holistic approach to understand future energy sector needs as California transforms its energy infrastructure away from dependence on fossil fuels."[5] Additionally, SCE appreciates the acknowledgment that alternate approaches are needed to help advance bioenergy projects with multi-sector environmental benefits, rather than relying solely on funding these projects through electricity rates.[6] As noted in the Final Report, with low gas prices and a declining cost of renewables, it would be useful for state agencies whose mission benefits from the disposal of biomass to develop or expand programs that offset the cost of biomass collection and distribution and therefore help bioenergy projects to compete against other electric technologies.

SCE continues to have concerns about the Final Report's recommendation that the CPUC "modify procurement practices to develop a higher-value portfolio"[7] by considering expanded renewable energy benefits including "dispatchable and reliable power, integration benefits, reduction in forest fires that threaten public health and safety and damage transmission lines, reduction in transmission and distribution costs, increased investment in disadvantaged communities, and creation of green jobs." As discussed in SCE's comments on the Draft IEPR[8] SCE recognizes the Energy Commission's effort to recommend meaningful modifications to the Least Cost Best Fit (LCBF) methodology and agrees that certain adjustments can be made to

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5 *See* Final IEPR Report, December 2013, pg. 57
6 *See* Final IEPR Report, December 2013, pg. 58
7 *See* Final IEPR Report, December 2013, pg. 77
8 *See* SCE Comments on Draft IEPR, October 29, 2013, pgs. 13 - 14

improve the methodology. In particular, SCE agrees that incorporating integration costs in bid rankings would meaningfully improve the LCBF process. With respect to the other proposed modifications to the evaluation process, however, SCE believes that reduced transmission and distribution costs are already being evaluated appropriately in the LCBF and that reductions in forest fires, increased investment in disadvantaged communities, and the creation of green jobs, are not appropriate modifications to the LCBF assessment. Such benefits are, at best, extremely difficult to quantify and to accurately apply in LCBF evaluations and thus should not be included in the evaluations.

Additionally, a technical error SCE identified in the draft report[9] persists in the Final Report. The Final Report states that "…the RPS [Renewables Portfolio Standard] no longer allows biomethane delivered through the natural gas pipeline to be eligible as a renewable resource unless the project provides environmental benefits to California."[10] This statement is only correct with respect to electrical generating facilities using biomethane delivered through a common carrier pipeline (1) under a new biomethane procurement contract or contract amendment executed on or after March 29, 2012, (2) under a biomethane procurement contract reported to the Energy Commission on or after March 29, 2012, or (3) associated with adjustments to existing biomethane procurement contracts reported to the Energy Commission prior to March 29, 2012.[11] Other grandfathered biomethane resources are not required to meet standards in order to be considered renewable resources. The Energy Commission should therefore revise this statement in order to clarify exactly when biomethane is considered eligible as a renewable resource.

Further, SCE notes that allowing additional biomethane fuels (beyond those mentioned above) to count towards RPS targets could result in a greater appeal of these fuels to electric generators. If biomethane does not count towards RPS, then it competes with natural gas, which is relatively inexpensive. However, if biomethane does count toward RPS credits, biomethane-fueled generation would compete with relatively more expensive renewable generation sources. While it is true that such a change to the RPS rules would require a change in the law, advocating for that change would be consistent with the requirement in Assemble Bill 1900, that the Energy Commission "…recommend solutions to challenges that limit procurement of biomethane."[12] Further, consuming biomethane in an efficient, low-emission generation facility results in less pollution than would occur if biomethane were to be vented unused into the atmosphere (or consumed in smaller, less clean generators at the procurement site). Hence, biomethane's use in large scale electric generation could have a positive environmental effect. SCE would, therefore, likely be supportive of legislation that encourages the Energy Commission to consider such advocacy.

Finally, one of the areas of concern mentioned in the Final Report[13] is a need for research into "constituents of concern for additional feedstock sources…." Biomethane issues have been

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9 *See* SCE Comments on Draft IEPR, October 29, 2013, pg. 14
10 *See* Final IEPR Report, December 2013, pg. 71
11 *See* Renewables Portfolio Standard Eligibility, Seventh Edition, Section II.C.2.c
12 *See* Final IEPR Report, December 2013, pg. 55
13 *See* Final IEPR Report, December 2013, pg. 77

addressed by the California Public Utilities Commission (CPUC) in R.13-02-008, and the "constituents of concern," was the subject of considerable testimony. Similarly, utilities have testified in the CPUC proceeding on the same concerns on the effect of biomethane injection into their pipelines and customer safety in that proceeding and biomethane advocates have likewise responded. Although the CPUC has not yet issued a final decision in that proceeding, it has issued a Proposed Decision on Phase I of the proceeding. In order to avoid a potential conflict between policies adopted between the two agencies, the IEPR should acknowledge the need to work cooperatively with the CPUC on these issues.

Chapter 4 – Electricity

First and foremost, although SCE acknowledges the importance of preferred resources in advancing California's energy and environmental policy goals, SCE also strongly supports a balanced approach for addressing local reliability needs in Southern California, particularly in light of the recent San Onofre Nuclear Generation Station (SONGS) shutdown and the State Water Resources Control Board regulations to retire coastal plants that utilize Once-Through Cooling (OTC) technology. SCE supports a strategy that includes further development of preferred resources, transmission facilities, and additional conventional gas-fired generation where necessary to maintain grid stability and reliability. SCE also believes that efforts to assure reliable service should be consistent with reasonable costs to all ratepayers.

Second, SCE recognizes and appreciates the Energy Commission's efforts to involve SCE and other stakeholders in the development of the Energy Commission's Electricity Demand Forecast for 2014-2024. SCE supports the use of the Mid-Base Case Demand Forecast, in combination with the Low Additional Achievable Energy Efficiency (AAEE) Scenario, as the single "managed" demand forecast to be considered for planning purposes, including system-wide, transmission, and local area planning. SCE believes that the Mid-Base Case and Low AAEE scenario represents a conservative and reasonable approach for planning purpose in the 2014-2015 planning cycle.

Although SCE supports the selected demand forecast and AAEE scenario, SCE notes that the AAEE scenario forecast is based on a draft report that has not yet been finalized,[14] and contains significant uncertainty for EE savings estimates beyond 2015. Given this uncertainty, SCE recommends that the Energy Commission postpone adopting post-2015 goals until the existing concerns and uncertainties in the report are resolved. Prior to the finalization of the 2013 EE potential study, SCE recommends the continued use of the 2012 Navigant EE Potential Study for savings estimates beyond 2015. If agencies must choose a scenario from the 2013 EE potential study, SCE recommends the low AAEE scenario to account for uncertainty in the AAEE forecast.

SCE would also like to thank the Energy Commission for incorporating many of SCE's revisions on Demand Forecast modeling issues, including peak demand modeling, weather

[14] *See* 2013 California Energy Efficiency Potential and Goals Study: Revised Draft Report, by Navigant Consulting Inc.: http://www.cpuc.ca.gov/NR/rdonlyres/29ADACC9-0F6D-43B3-B7AA-C25D0E1F8A3C/0/2013CaliforniaEnergyEfficiencyPotentialandGoalsStudyNovember262013.pdf

normalization methodology, and data integrity. SCE also appreciates the Energy Commission's efforts to improve granularity in the demand forecast by providing climate-zone-level data. SCE recommends, however, that this analysis be further examined to improve stakeholder understanding of the forecast and its implications. SCE believes that it is critically important to enhance stakeholder engagement and improve transparency in the forecast development process so as to ensure that more granular forecasts are developed in the future.

SCE acknowledges that there are additional opportunities to improve accuracy and further refine the Demand Forecast that should be addressed in future IEPR cycles.[15] SCE looks forward to its continued coordination with the Energy Commission and stakeholder to address these issues and to continue enhancing the Demand Forecast in future IEPR cycles.

Chapter 5 – Transmission

SCE would like to thank the Energy Commission for its incorporation of SCE's comments relating to transmission infrastructure, and particularly its revisions to deliverability and transmission corridor designation issues.

Chapter 6 – Nuclear Energy

SCE appreciates the Energy Commission's inclusion of SCE's suggested revisions relating to the SONGS Closure. It appears that the Energy Commission incorporated all of SCE's proposed revisions in Chapter 6, excluding the recommended deletion of the last sentence under the section "Economic Considerations" on page 161. The sentence reads: "SCE anticipates Units 2 and 3 decommissioning activities to commence in mid-2015."

SCE previously recommended that this sentence be deleted because SCE has not yet issued a schedule indicating when decommissioning activities will begin. SCE reiterates its recommendation for deleting this sentence on the basis that it is premature for the Energy Commission to indicate a timeline for decommissioning.

In addition to previously submitted recommendations, SCE suggests additional edits to pages 168 of the Final Report in Appendix 8.

Chapter 7 – Natural Gas

SCE has no additional comments on this chapter.

Chapter 8 – Alternative Fueled Vehicles

SCE appreciates the Energy Commission's consideration and incorporation of SCE's comments on Alternative Fueled Vehicles.

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[15] For example, SCE understands that the Energy Commission has not been able to incorporate a full update to its 2011 IEPR transportation energy demand forecast, which is important for providing more accurate future load growth outlook from electrification load.

In SCE's previous comments on the Draft IEPR,[16] SCE expressed concerns regarding the calculated miles per year for Plug-in Electric Vehicles (PEVs). SCE believes that the gigawatt-hours (GWhs) from PEVs should be based on at least 10,000 miles per year rather than the approximately 5,200 miles per year recommended by the Energy Commission. It is unclear whether this comment was taken into account, as the final report did not contain a supplemental document noting the assumptions for PEVs like that included in the Draft IEPR. SCE requests that the Energy Commission provide clarification on the assumptions that it used for PEVs.

Chapter 9 – Climate Change

SCE has no additional comments on this chapter.

In conclusion, SCE appreciates the Energy Commission's consideration of these comments and looks forward to its continued collaboration with the Energy Commission. Please do not hesitate to contact me at (916) 441-2369 with any questions or concerns you may have. As always, I am available to discuss these matters further at your convenience.

Very truly yours,

/s/ Manuel Alvarez

Manuel Alvarez

[16] *See* SCE Comments on Draft IEPR, October 29, 2013, pg. 26

Appendix A

APPENDIX A

Page 1, second paragraph:

DR was described in the Final Report as "using less" energy when needed for optimal grid operation; however, it should be described as "modifying ~~using less~~ energy when needed for optimal grid operation." DR can be used to modify energy usage either in the form of decreasing or increasing energy demand based on grid conditions.

Page 38, 1st paragraph, second sentence:

SCE suggests the following modification to more accurately describe demand response: "DR – essentially the modification of energy usage due to market, grid, or pricing signals ~~reducing electricity use or shifting it to another period~~ – provides many benefits…"

Page 38, 3rd paragraph:

The Final Report states, "There has been little progress toward increasing the amount of DR used in the state." This statement appears to be based on the 2012 FERC Survey which showed a graph of how CAISO's DR integrated resources will be flat from 2010 to 2012. The flat forecast was due to the market rules still in development. This paragraph does not consider the amount of available DR that has been increasing in the State since 2010. SCE recommends striking the paragraph, or, rephrasing it to state that, "…little progress toward increasing the amount of DR which is integrated into the CAISO market ~~used in the state~~."

Page 42, Figure 3:

SCE recommends removing 2008 and 2009 from the chart because the data for those years used a different method for counting DR resources than that which was used for subsequent years. For the 2010 forecast year, Investor-Owned Utilities (IOUs) began using the Load Impact Protocol methods adopted in D.08-04-050 which were first filed in April 2009.

Page 44, last paragraph:

SCE disagrees with the description of the Staff report, as noted in previous comments submitted on the Draft IEPR[1]. Furthermore, SCE believes that the statement on page 44 confuses the loading order with the principle of least-cost dispatch. SCE recommends that the sentence be revised as follows, "Staff's analysis provided a number of recommended changes to the programs, including a change for dispatching DR prior to fossil generators ~~found a number of fundamental problems with the programs, including a demonstrated preference for dispatching fossil generators instead of available DR, despite state policy on the loading order of preferred resources~~."

Page 45, 2nd paragraph:

[1] *See* SCE Comments on Draft IEPR, October 29, 2013, pg. 10

SCE recommends the following edits: "In November of 2013, the CPUC and SCE held a workshop to discuss proposals for SCE's "Preferred Resources ~~Living~~ Pilot." The goal of this process is to develop a comprehensive, accelerated approach to assembling preferred resources (including efficiency and demand response resources), energy storage, and other advanced technologies in the area of SCE's territory most affected by the SONGS shutdown. The assembled approaches are intended to be followed closely and modified as necessary to increase the effectiveness of the pilot."

Page 45, 3rd paragraph:

SCE recommends revising to: "Reliability Demand Response Resource product ~~program."~~

Page 45-46, last paragraph, continued to page 46:

The sentence stating, "California ISO…~~has~~ instituted a stakeholder process to develop a *Demand Response and Energy Efficiency Roadmap*," should be corrected accordingly now that CAISO has published its completed DR and EE Roadmap.

Page 46, last paragraph:

In the sentence stating "the IOUs had just 250 MW of dispatchable load using OpenADR," SCE recommends removing the word "just" as it suggests that more OpenADR MW could have been achieved. The statement should consider the program a success due to the IOUs not receiving full program funding until August 2009, the timing necessary to complete a project, and the considerable MW currently pending installation.

Page 168, 2nd paragraph:

> "The scope of Phase 2 evidentiary hearings, ~~scheduled for~~ held October 2013, will include determining the value(s) ..."

Additionally, the last sentence in the same paragraph as above reads: "A Phase 2 decision is anticipated in February 2014."

However, given the uncertainly of when the CPUC will issue a proposed decision for Phase 2, we recommend the Energy Commission make the following change:

Page 168, 2nd paragraph:

> "A Phase 2 decision is anticipated in ~~February~~ 2014."