COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY TO THE CALIFORNIA AIR RESOURCES BOARD ON THE SECOND 15-DAY MODIFICATIONS TO THE CAP-AND-TRADE REGULATION

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Dated: **September 27, 2011**

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I.

INTRODUCTION AND EXECUTIVE SUMMARY

Pursuant to the Second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information,[1] Southern California Edison Company ("SCE") respectfully submits its comments on the Second Proposed 15-Day Modifications to the Cap-and-Trade Regulation ("September 2011 Proposed Modifications") issued by the California Air Resources Board ("ARB") on September 12, 2011.[2]

Once again, SCE thanks ARB staff for their hard work in developing the cap-and-trade regulation to reduce greenhouse gas ("GHG") emissions pursuant to Assembly Bill ("AB") 32.[3] SCE recognizes ARB staff for their willingness to collaborate with stakeholders to review and revise the regulation language in individual and group stakeholder meetings, including the Electricity Technical Meeting held in Sacramento on August 26, 2011. The September 2011 Proposed Modifications incorporate many of the comments, both written and oral, from stakeholders on the revised regulatory language over the past few months.

Specifically, SCE thanks ARB staff for removing the fixed rebate language addressing the return of allocated allowance value to customers by electrical distribution utilities. SCE also thanks ARB for modifying the definition of an electricity importer. In addition, ARB has revised the offset reversal provisions in a way that provides covered entities and other market participants with more clarity and certainty. Furthermore, SCE supports the new "RPS Adjustment" rules, which allow covered entities to receive credit for out-of-state renewable

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[1] California Air Resources Board, "Second Notice of Public Availability of Modified Text and Availability of Additional Documents and Information," September 12, 2011, *available at* http://www.arb.ca.gov/regact/2010/capandtrade10/2nd15daynotice.pdf.

[2] California Air Resources Board, Second Proposed 15-Day Modifications to the Cap-and-Trade Regulation ("September 2011 Proposed Modifications"), September 12, 2011, *available at* http://www.arb.ca.gov/regact/2010/capandtrade10/2ndmodreg.pdf.

[3] Cal. Health and Safety Code § 38500 et seq.

procurement eligible for Renewables Portfolio Standard ("RPS") program credit.[4] SCE also supports the revised rules for resource shuffling.

Although SCE acknowledges the many positive improvements to the cap-and-trade regulation, it continues to have concerns about certain market design issues that can have market-changing consequences for SCE's customers. In particular, the language for beneficial holding relationships is still insufficient. While SCE recognizes and appreciates that ARB was motivated to create beneficial holding relationships to prevent parties from having excessive market power, the current rules are very problematic for large investor-owned utilities ("IOUs"), and will force them to utilize financial derivatives to manage their customers' risk to GHG pricing. This is true even though regulatory oversight from the California Public Utilities Commission ("CPUC" or "Commission") precludes IOUs with larger holding limits from seizing excessive market power and gaming the market. SCE again proposes simple revisions to the holding limit and the beneficial holding concept, which will address the IOUs' increased risk exposure without creating the potential for market manipulation.

SCE also has serious concerns about the Qualified Exports Adjustment ("QE Adjustment") for adjusting compliance obligations based on net imports and exports. SCE strongly supports this concept, and the ARB's proposed revisions to the Qualified Exports language do make the rule easier to apply. However, the current proposed QE Adjustment rules remain extremely problematic and could create perverse incentives contrary to the emissions reduction goals of AB 32. SCE proposes a revised calculation for adjusting the compliance obligation for Qualified Exports. SCE also proposes applying the same transmission loss factor to Qualified Exports as that applied to offset imported electricity.

Beneficial holding relationships and QE Adjustments represent two important areas that need to be addressed in the September 2011 Proposed Modifications before the final regulation is

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[4] SCE does, however, propose to apply the Transmission Loss Correction Factor, which is applied to imported electricity, to the RPS Adjustment in order ensure that the RPS Adjustment will fully offset the GHG emissions related to the replacement electricity that is imported in order to satisfy RPS obligations.

submitted for Board approval. Both could raise significant issues for cost containment that will seriously affect SCE's customers, and both could result in undesirable market problems.

SCE offers below its comments on and suggestions for the September 2011 Proposed Modifications, in the following order: 1) beneficial holding relationships and holding limits; 2) the QE Adjustment; 3) allocation of allowance value; 4) market readiness; 5) offset reversal; 6) the RPS Adjustment; and 7) resource shuffling.

II.

THE BENEFICIAL HOLDINGS LANGUAGE REMAINS PROBLEMATIC FOR IOUS; ARB SHOULD RECONSIDER THE SIZE OF THE HOLDING LIMITS

A. ARB Should Increase the Holding Limits for Regulated Electric Distribution Companies

1. ARB Should Re-Evaluate Utility Holding Limits in a New Market Design Rulemaking

SCE understands and shares ARB's concerns regarding market manipulation and market power issues and supports the establishment of holding limits in California's cap-and-trade program. However, the current holding limit is too small for entities like SCE that have large compliance and contractual compliance obligations and significant exposure to GHG emissions costs through wholesale electricity prices.[5] Under the current construct, SCE cannot appropriately hedge on behalf of its customers using compliance instruments, and will be compelled to make extensive use of derivative instruments, potentially at a sizeable cost, in order to appropriately protect its customers from unexpected risk.

[5] Comments of Southern California Edison Company to the California Air Resources Board on Its Proposed 15-Day Modifications to the Cap-and-Trade Program Released July 25, 2011 ("SCE August 11 Comments"), at 27-28, *available at*http://www.arb.ca.gov/lists/capandtrade10/1504-sce_comments_to_arb_on_cap-and-trade_15_day_language_july_2011.pdf.

SCE reiterates its position that the holding limit for a regulated electric company should be based on its annual GHG cost exposure (using the annual allowance allocation as a proxy). As discussed in detail below, highly-regulated entities such as IOUs pose no risk of market manipulation. ARB should adjust holding limits for the regulated electric distribution companies to allow them to mitigate their GHG cost exposure and protect their customers from significant financial risk. The new market design and testing rulemaking is an appropriate venue for reevaluating these holding limits to improve them further. In the meantime, modest adjustments must be made before the final regulations are submitted to the Board for approval, in order to create a workable framework before the cap-and-trade program officially begins.

2. Regulated Utilities Do Not Pose a Risk of Allowance Market Manipulation

California IOUs such as SCE have no incentive to speculate in their energy and energy-related procurement activities, including the purchase and sale of GHG compliance instruments. These activities are governed by the IOUs' CPUC-approved AB 57 Bundled Procurement Plans ("Procurement Plans"),[6] and are conducted on a cost-pass-through basis, with their customers paying for all the costs and receiving all of the benefits. There is no opportunity for IOU shareholders to make any profit under these plans. Consistent with AB 57,[7] Procurement Plans establish "up front and achievable" standards for all procurement transactions (including purchases of compliance instruments), which if met, make that transaction eligible for cost recovery from IOU customers. If an IOU enters into a transaction that does not conform with these plans (which, in SCE's case, provide no opportunity for speculation), then that IOU is subject to reasonableness reviews that could result in a potential cost disallowance. In other words, so long as compliance instrument procurement on behalf of customers complies with the

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[6] SCE has filed its GHG Procurement Plan in Track III of the 2010 LTPP Proceeding, on July 1, 2011, in the CPUC's Rulemaking R.10-05-006. Once it is approved, it will be subsumed into SCE's CPUC proposed AB 57 Bundled Procurement Plan, which was filed April 20, 2011. SCE's proposed Procurement Plan is non-confidential but for some appendices detailing positions and limits. The Commission-adopted Conformed 2006 Procurement Plan is presently in effect for SCE until the Commission acts on the new proposals in the R.10-05-006 docket.

[7] Public Utilities Code § 454.5(b)(7).

CPUC-approved Procurement Plan, all costs and benefits are passed through to IOU customers. If they do not, then the IOUs are at risk. Therefore, the IOUs have no incentive to engage in speculative activity or any procurement activity outside of the CPUC-approved procurement plans.

Commission oversight of IOUs' procurement activities does not end with the approval of the Procurement Plan. Once the Procurement Plan is approved, each IOU's Procurement Review Group ("PRG")[8] reviews that IOU's procurement strategy and hedging plans. In addition, the IOUs are required to review all significant procurement with the PRG prior to execution. The IOUs also submit all transactions executed to the Commission on a quarterly basis (through its Quarterly Compliance Report), and procurement activities are reviewed annually for compliance with least-cost dispatch and for prudent contract administration through the Energy Resource Recovery Account ("ERRA") proceeding.

Because the CPUC will maintain its regulatory oversight of the IOUs, ARB should recognize that the IOUs are not at risk of manipulating or speculating in the GHG compliance instrument market. Rather, SCE and the other IOUs have strong interests and obligations to hedge customer price risk efficiently and effectively, subject to the oversight and direction of the CPUC.

3. <u>SCE's Proposed Modification to the Holding Limit Calculation</u>

For all the reasons discussed above, SCE once again offers a simple modification to the formulas in Section 95920(d)(1):

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[8] Procurement Review Groups are ad hoc groups comprised of CPUC staff and various non-market participant parties who periodically review IOUs' procurement activities pursuant to their CPUC-approved Procurement Plans.

(1) The number given by the following formula:

Holding Limit = the greater of

1) 0.1 * Base + 0.025*(Annual Allowance Budget – Base)

In which:

"Base" = 25 million metric tons of CO_2e, or

2) an individual utility's allowance allocation for that same year as defined in Table 9-3.

This proposal would adjust the holding limits based on a regulated entity's GHG market exposure while recognizing that regulated utilities such as SCE will be unable to manipulate the market.

B. The Beneficial Holding Relationship Regulations Require Further Clarification and Revisions

1. ARB's Proposed Beneficial Holding Regulations Need Clarification and Do Not Fully Solve the Underlying Issue

Sections 95802(a)(28) and 95834 establish beneficial holding relationships, or principal-agent relationships, for the purpose of holding compliance instruments.[9] In previous comments and in the comments above, SCE explained in detail why the current six million metric ton ("MMT") holding limit was insufficient for large IOUs with large contractual and wholesale electricity price exposures to GHG prices.[10] SCE understands and recognizes that the concept of a beneficial holding relationship was developed, in part, in response to concerns by SCE and others about the size of the holding limits. In the September 2011 Proposed Modifications, ARB again revised the beneficial holdings language in response to stakeholder concerns. SCE

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9 September 2011 Proposed Modifications, § 95802(a)(28), at A-9; § 95834, at A-78 to A-81.

10 Comments of Southern California Edison Company to the California Air Resources Board on Its Proposed Regulation to Implement the California Cap-and-Trade Program, ("SCE December 2010 Comments"), at 15, *available at* http://www.arb.ca.gov/lists/capandtrade10/393-sce_comments_to_carb_on_cap-and-trade_proposed_regulation.pdf; SCE August 11 Comments, at 27-31.

acknowledges that ARB has improved the beneficial holdings concept by removing the concept of "ownership interests."[11] However, upon further review, the beneficial holding language has significant inconsistent, uncertain, and unfeasible provisions. As currently structured, this language would at the very least create major market issues and potentially prove to be completely unworkable.

Certain aspects of the beneficial holdings provisions, specifically those relating to the "Disclosure of Beneficial Holding," are not clear. Section 95834(b)(2) lays out a process whereby a principal must confirm a transfer of allowances. However, it is not clear which transfer must be confirmed – the initial transfer to the agent's account, or the transfer between the account of the agent and the principal. In addition, although this section refers to "transactions," it references only the provisions for "trading" in Section 95921(a). Thus, an agent that bids into ARB's auction has no guidance on acquiring allowances for beneficial holding purposes.

SCE offers one possible interpretation of these provisions: an agent must earmark allowances for a specific principal *before* purchasing these allowances from an auction or in the secondary market. The principal for which the agent is procuring must agree to this purchase, and also approve the transfer of these allowances into the agent's holding account. Upon transfer into the agent's holding account, these allowances count against the *principal's* holding limit. The agent will have up to one year to transfer these allowances into the principal's holding account.

SCE has numerous concerns with the draft provisions under this interpretation. They include the following:

1. For entities such as SCE, who are likely to enter into multiple agent-principal relationships due to a large and varied contractual portfolio, it would be very

[11] *See* SCE August 11 Comments, at 32.

problematic to earmark allowances to specific principals before acquiring the allowances; this will result in inefficient processes.

2. Requiring principals to agree to each compliance instrument purchase adds numerous complications and could completely disrupt the bilateral market and auction process. In addition, requiring a principal's approval to transfer allowances to an agent's account will give the principal a "veto power" to reject any purchase or transfer without having to provide any justification.
3. Accounting for the allowances that are in all of the agents' accounts when calculating the principals' holding limits will likely place a large administrative burden on ARB.

SCE explains these concerns in more detail below.

First, given the size and composition of its resource portfolio, SCE will have many agent-principal relationships and will have to procure as an agent on behalf of many principals. Requiring separate transactions for each of these principals – in order to properly "earmark" the transaction as required in Section 95834(b)(2) – will result in inefficient and convoluted auctions and secondary market processes. For example, SCE would have to submit, and ARB would have to evaluate, individual bids into an auction on behalf of each of its principals, in addition to its own compliance needs, instead of submitting a single bid. Additionally, the current provisions would require agents to accurately predict their principals' compliance needs beforehand. In the California electricity market, generator dispatch decisions are made on a daily and even hourly basis, largely by the California Independent System Operator ("CAISO").[12] These decisions are very difficult to accurately forecast on an individual basis, but are more accurately forecast in aggregate. If SCE were forced to predict how many allowances it would need to transfer to a specific principal and procure these allowances in advance, SCE may have perverse incentives to either adjust generator schedules in order to ensure that those allowances do not go to waste, or in the opposite case, reduce generator schedules to make sure they do not exceed the number of

[12] After each generator submits unit-specific energy and ancillary services bids, the CAISO determines dispatches based on supply, demand, and grid conditions.

allowances procured. If SCE were able to procure beneficial holding allowances for its entire portfolio *in aggregate*, this incentive is greatly reduced. As currently constructed, the proposed rules would effectively require SCE to manage the GHG risk of each generator agreement separately, rather than as a portfolio. Separate management introduces a number of inefficiencies and logistical difficulties which could be avoided if multiple principal-agent relationships were managed as a portfolio.

Second, requiring principals to agree to each compliance instrument purchase could completely disrupt the functioning of the bilateral market and auction process, given the potential for rejected or cancelled transfer requests. Before clearing and filling bids in the auction, the accounts administrator would have to somehow ensure that principals would confirm their agents' procurement. At best, this would create a significant delay in the filling of auction bids; at worst, it would drastically change the bid curve and thus the eventual settlement price and quantity sold to each compliance entity.

Similarly, granting principals a veto power could significantly reduce the efficiency of the bilateral trading market. For example, to purchase compliance instruments in the bilateral trading market, SCE would need to contemplate the possibility that the principal would reject the transfer requests. In order to protect SCE's customers from disproportionate risk, SCE (and any other "agent" in a similar situation) would then have to consider transaction agreements that are contingent on approval from the principal. Doing so would be costly, as sellers would either not sell, or add a risk premium based on the risk of the sale not going through. Additionally, the current beneficial holding rules suggest that a principal's "veto power" over procurement transactions can be exercised for any reason. The proposed language provides no restrictions on the rejection of transfer requests by a principal; although a principal may merely wish to avoid exceeding a holding limit, it could also simply decide that it disliked the terms of the proposed transaction. Principals would have significant levels of both power over and insight into agent procurement activities, and could easily take advantage of the veto power to engage in market gaming activities. Although some of these issues could be resolved in the principal-agent agreement itself, the proposed rules create significant obstacles for implementing the beneficial holding account concept.

Third, the proposed language requires significant ARB oversight in order to ensure that agents and principals do not exceed their holding limits. For agents, ARB will have to maintain careful records of all beneficial holding transactions to calculate the holdings that must comply with the holding limit. ARB will also have the burden of ensuring that agents transfer the correct serial numbers to their principals' accounts within a year of their procurement. This will be especially complicated for agents that may procure large numbers of allowances for their principals in each quarterly auction, as they would have to take care to transfer the "oldest" allowances first. For principals, ARB must track the beneficial holdings that are in each of their agents' accounts. In the electricity sector in particular, where some independent power producers have large fleets that are contracted out to multiple utilities or other distribution companies, it will be common for one principal to have many agents. Under the ARB's proposed language, ARB will have to track each of these agents' transactions and holdings to ensure compliance with the principal's holding limits. While this oversight is possible, it would be unnecessarily time-and energy-intensive, and may detract from the effort that staff can put into monitoring other important aspects of the market.

2. **ARB Should Consider Allowing Agents to Transfer Beneficial Holding Compliance Instruments into Their Own Compliance Accounts First and Then to Principals' Compliance Accounts**

In light of the many issues identified above, SCE offers a simpler framework as a workable alternative solution: ARB should allow agents to acquire and transfer compliance instruments for beneficial holding directly to their own Compliance Accounts. From there, the compliance instruments could later be transferred to one or more of their principals' Compliance Accounts.[13]

ARB's proposed rules regarding the disclosure of beneficial holding relationships would then apply. Specifically, agents must report the identity of the principal(s), their account information, and the nature of the relationship to the Executive Officer. SCE proposes that agents, both annually and as-needed, inform ARB of the specific facilities for which they will be procuring beneficial holding allowances for compliance in the following calendar year. As described below, this will provide a baseline for the Executive Officer to ensure that agents do not abuse this rule by drastically over-procuring compliance instruments, and thus circumventing the intent behind holding limits.

Once it is established that an entity will act as an agent in this type of beneficial holding relationship, SCE proposes that ARB should allow the agent to purchase allowances – either in the auction or the secondary market – and place them directly in its own compliance account. ARB should then allow the Executive Officer to transfer compliance instruments from the agent's Compliance Account to the principal's Compliance Account upon the agent's request. Until such transfer is initiated, such compliance instruments that are added to the agent's compliance account for beneficial holding will be subject to the agent's Compliance Account-based limited exemption.[14]

In order for agents to temporarily hold allowances for their principals in this way, their Compliance Account-based limited exemption to the holding limit would need to be expanded. SCE suggests that ARB calculate this increase as *the sum of the positive or qualified positive verification statements from the previous year* of all of the principals' facilities with which the

[13] Arab's proposed regulations already allow compliance instruments to be transferred directly upon purchase into a Compliance Account. Section 95912(k)(3) provides: "Upon determining that the payment for allowances has been deposited....transfer the serial numbers of the allowances purchased into each winning bidder's Holding Account, or to its Compliance Account if needed to comply with the holding limit." September 2011 Proposed Modifications, § 95912(k)(3), at A-168.

[14] *See* September 2011 Proposed Modifications, § 95920(d)(2), at A-185 to A-187.

agent has a beneficial holding relationship.[15] The identity of these facilities will be reported to ARB at least annually, as described above. This amount, which may be referred to as the "Beneficial Holding Compliance Instruments Limit," would be added to the limited exemption[16] from the agent's holding limit. After the compliance instruments have been transferred to the principal's Compliance Account, they would be captured under the principal's limited exemption calculations. Meanwhile, because the compliance instruments are still subject to the existing limitations on the Compliance Accounts,[17] there is no economic incentive for the principal to simultaneously over-procure compliance instruments and place them in their own Compliance Account, which could violate the intent of holding limits and the Compliance Account-based limited exemption to the holding limit.

While increasing the holding limits for entities such as electric distribution utilities would be the most simple and effective solution to utility holding limit concerns, the proposal described here may serve to address these concerns while maintaining the general structure of the beneficial holdings language.

III.

THE CURRENT PROPOSAL FOR THE QUALIFIED EXPORT ADJUSTMENT REQUIRES ADDITIONAL CHANGES TO REDUCE PERVERSE INCENTIVES

A. ARB Must Revise How the Qualified Export Adjustment Is Calculated

In the July 2011 Proposed Modifications, ARB introduced the concept of Qualified Exports, which are those exports that occur in the same hour as electricity imports.[18] Sections 95802(a)(225) and 95852(b)(5) of the September 2011 Proposed Modifications create a QE Adjustment, which is calculated by multiplying (1) the lower of the quantity of imports or

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[15] This calculation parallels the existing limited exemption language contained in Section 95920(d)(2)(A).

[16] Section 95920 (d)(2)(A) bases the agent's limited exception on the agent's own positive or qualified positive verification statement.

[17] For example, a compliance instrument transferred into the Compliance Account cannot be removed.

[18] July 2011 Proposed Modifications, § 95802(a)(218), at A-36 and § 95852(b)(6), at A-83.

the quantity of exports by (2) the lowest emissions factor of any of their imported and exported power of that hour.[19] The QE Adjustment is subtracted from a covered entity's compliance obligation.[20]

SCE appreciates ARB's intent to develop useful and pragmatic rules for compliance flexibility that are appropriate for power marketers and other electricity sector covered entities. The complexity and timelines of energy markets and scheduling will occasionally create situations where in-state load-serving entities ("LSEs") and power marketers will export power and import power all within the same hour. The QE Adjustment rules provide an opportunity for power marketers to avoid excess or redundant compliance obligations for power that does not ultimately serve California load.

The QE Adjustment rules as currently written, however, create significant perverse incentives for market players. Qualified Exports provisions should be designed to be easily applicable and to create incentives for proper market behavior. However, SCE has identified a number of situations where the proposed rules could penalize a market participant who chooses to import low-GHG energy instead of high-GHG energy. In other words, these provisions could provide a *disincentive* to import clean energy.

SCE offers a few simple examples to illustrate how the proposed rules could discourage imports of clean energy. In any hour when an entity is importing any amount of renewable energy (at a zero-GHG emissions rate), the QE Adjustment will automatically be zero, even if both the system energy imports and exports significantly exceed the renewable energy imports during that hour. This is clearly a disincentive to import any renewable energy during an hour where an importer has sizeable non-renewable imports and exports.

For example, assume a power marketer intends to import ten megawatt-hours ("MWh") and export five MWh within a given hour. In this case, the compliance obligation for this market

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[19] September 2011 Proposed Modifications, § 95802(a)(225), at A-39 to A-40, and § 95852(b)(5), at A-93 to A-94.

[20] September 2011 Proposed Modifications, § 95852(b)(1)(B), at A-89.

participant will be higher if the import mix is comprised of one MWh of energy with a zero-GHG emissions factor and nine MWh of energy with a default system emissions factor, compared to a case where all ten MWh of imports are rated at the default system emissions factor. This result occurs because in the latter case, the lowest emissions factor of all the imports and exports in that hour is the system default rate, or 0.428 metric tons per MWh. The compliance entity thus multiplies the 0.428 emissions factor by five (the lower quantity between its imports and exports), to calculate the number of emissions (or QE Adjustment) it can then subtract from its compliance burden. However, in the first case, where the compliance entity imports a mix of clean and system energy, the lowest emissions factor is zero. This means that the QE Adjustment is also zero.[21] Under these rules, a power marketer, including a utility, is then penalized for switching (on the margin) to a cleaner energy import.

SCE strongly urges ARB to change the structure of this rule to provide incentives to drive greenhouse gas reductions. Below, SCE provides two proposals: (1) a simple redline change, and (2) a more robust overhaul of the QE Adjustment using a "lowest first" calculation. In either case, ARB must weigh the outcomes of these changes as well as the possibility of unanticipated outcomes. Neither proposal fully aligns market incentives correctly, although the more robust proposal could possibly fully eliminate the potential disincentives of the current rule.

The simple, redline improvement to the current proposal would set the GHG emissions rate on qualified exports as the "the lowest <u>*non-zero*</u> emissions factor" of any of the imported and exported power of that hour. This small change eliminates the disincentive to import zero-GHG energy and is likely to improve the rule. Using the ten-MWh example described above, the total compliance obligation calculated under this rule is unchanged if the importer opts to import one MWh of zero-GHG energy. Thus, this rule change eliminates the perverse incentive to avoid importing zero-GHG energy. However, this small redline solution remains imperfect, because it

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[21] The total compliance burden in the combination clean and system case can be calculated as follows: (9*.428) + (1* 0) – (5 * 0) = 3.852 MT GHG. The total compliance burden in the all-system case can be calculated as follows: (10*.428) – (5*.428) = 2.14 MT GHG.

penalizes power marketers who import energy on the margin with cleaner or near-zero emissions factors.[22] Moreover, the market-changing effects of this rule on BPA-sourced or other low-emissions imports are difficult to anticipate. Before adopting this simple redline change, ARB should assess how often BPA-sourced power is expected to be the marginal import and whether the size of the BPA supply pool justifies these concerns. Accordingly, ARB should also strongly consider a more robust market design option to supersede this "no regrets" move.

As an alternative, SCE suggests a more nuanced set of QE Adjustment rules that may bring about a more robust market structure. SCE proposes a "lowest first" QE Adjustment calculation: megawatt-hours ("MWh") of qualified exports should be assigned an emissions factor based on the emissions factor of that hour's imports, in a sequence, starting with the lowest emissions rate imports first.[23] Compare this proposal to the existing rule using the same example as above, where a power marketer imports ten MWh – nine at the system default rate and one with an emissions rate of zero – and exports five MWh. Under this new rule, one MWh of exports would be assigned an emissions rate of zero, while the remaining four would be assigned the system default emissions rate. Unlike the existing rules, or the simple redline change proposed above, this "lowest first" QE Adjustment calculation provides no disincentive for entities to import any form of cleaner energy on the margin. In addition, this approach more accurately reduces the excess GHG obligation. The QE Adjustment would thus become far more functional and effective.

SCE recommends that ARB continue to make improvements to the design and structure of the QE Adjustment. SCE's "lowest first" approach eliminates the disincentives for importing any form of clean energy. It may not *create* incentives for importing cleaner energy, although other programs and policies are already in place to provide these incentives. Ultimately, the QE

[22] This includes Bonneville Power Administration ("BPA")-sourced energy, which receives an emissions rate that is 20% of the system default rate.

[23] SCE has attached a diagram outlining this proposal in Appendix A.

Adjustment should work to provide needed flexibility for power marketers while aligning market behaviors in a manner that supports the goals of AB 32 and drives market efficiency.

In light of these design deficiencies and the potential for unintended consequences, SCE continues to support market preparedness efforts, and urges ARB to revisit this topic in the upcoming market readiness rulemaking. Market preparedness efforts should include an action plan for quickly adjusting the QE Adjustment rules, as well as a full market simulation and modeling on the impacts of the cap-and-trade rule on electricity market transactions. Because prices and behavior will undoubtedly shift over time to respond to GHG pricing and regulations, proper system modeling highlight distortional or negative impacts on markets that result from the cap-and-trade regulation. Even with modeling data, some market effects may be difficult to anticipate. Thus, ARB should be prepared for market-changing consequences by articulating a strategy for revisiting and adjusting the rules as needed.

B. A Transmission Loss Correction Factor Must Be Applied to the QE Adjustment

ARB has proposed a Transmission Loss Correction Factor (TL) of 1.02 to imported electricity from unspecified and specified sources in order to account for transmission losses between the measurement at the busbar and the measurement at the first point of receipt in California.[24] However, ARB has not included such a TL in the QE Adjustment calculation.[25] Applying a TL factor only to imported electricity, but not applying the same TL factor credit to offsetting exported electricity, will create an inconsistency that is unfair and leads to unintended consequences. Without the TL, the QE Adjustment will always be lower than the GHG emisisons calculated for imported electricity by the 2% adjustment factor. Qualified Exports should be able to offset all of the GHG emissions calculated for imported electricity.

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[24] Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, §§ 95111(b)(1)-(2).

[25] *See* September 2011 Proposed Modifications, § 95852(b)(5), at A-93 to A-94.

Accordingly, ARB should apply the same TL factor to the QE Adjustment to maintain this consistency in the regulations.

IV.

<u>SCE COMMENDS ARB FOR REMOVING THE FIXED REBATE LANGUAGE AS THE CHANGE WILL HELP ENSURE A SUCCESSFUL CAP-AND-TRADE PROGRAM</u>

SCE commends ARB for removing Sections 95892(d)(3)(B) and (C), which required the electrical distribution utilities to return any allowance values to customers through the use of a fixed rebate or credit, rather than based on the quantity of electricity delivered to ratepayers. Removing this language will ensure that the decision of how to allocate allowance value to customers will be appropriately addressed by the CPUC – the agency with plenary jurisdiction to do so. Additionally, from a policy standpoint, the removal of this language is a step in the right direction towards ensuring a successful cap-and-trade program. A fixed rebate would otherwise result in sudden rate increases for some customers, while potentially creating an incentive for others to increase their electricity usage. This approach would not garner the needed public support for the cap-and-trade program. SCE has and will continue to argue at the CPUC that an allowance value return that is proportionate to the emissions reduction costs incurred by customers will prevent all California electricity customers from experiencing sudden rate increases. Given the importance of this issue to the success of the cap-and-trade program, SCE thanks ARB for ensuring that it is addressed in the appropriate proceeding and in the appropriate jurisdiction.

SCE requests one clarifying change to Section 95892(d)(5). Currently, Section 95892(d)(5) reads as follows:

> <u>Prohibited Use of Allocated Allowance Value</u>. Use of the value of any allowance allocated to an electric distribution utility, other than for the benefit of retail ratepayers consistent with the goals of AB 32 is prohibited, including use of such

> allowances to meet compliance obligations for electricity sold into the California Independent System Operator markets.[26]

Section 95892(d)(5) uses the terms "allowances" and "allowance value" interchangeably, with the phrase "such allowances" referring back to the "value of any allowance."[27] SCE is concerned that this section, if interpreted broadly, could prohibit the use of any allowance revenues to meet compliance obligations for any electricity that is sold into the CAISO, which would include all utility sales. This is clearly not the intent of Section 95892(d)(5). The language should be amended as follows:

> <u>Prohibited Use of Allocated Allowance Value. Use of the value of any allowance allocated to an electric distribution utility, other than for the benefit of retail ratepayers consistent with the goals of AB 32 is prohibited.</u>
>
> <u>Prohibited Use of Allocated Allowances. Use of any allowances to meet compliance obligations for electricity sold into the California Independent System Operator Markets is prohibited.</u>

These modifications will ensure that there is only a prohibition on the use of allowances (not allowance value) for meeting compliance obligations for electricity sold into the CAISO.

V.

<u>SCE SUPPORTS ARB'S PREVIOUSLY ANNOUNCED RULEMAKING ON MARKET READINESS ISSUES AND URGES ARB TO OPEN THE PROCEEDING AS SOON AS POSSIBLE IN ORDER TO MINIMIZE THE CHANCE FOR MARKET MANIPULATION</u>

SCE maintains that a robust and well-tested market design is crucial to the success and eventual expansion of California's cap-and-trade program. In its December 2010 Comments on the Proposed Draft Regulation, SCE recommended a delay in the cap-and-trade program, and

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[26] September 2011 Proposed Modifications, § 95892(d)(5), at A-143.
[27] *Id.*

suggested an extensive stakeholder process to allow compliance entities and market participants to identify issues and provide potential alternatives for the auction and market design.[28]

ARB has announced a one-year delay of the compliance elements of the cap-and-trade program, which SCE enthusiastically supports. The additional time is crucial for allowing greater scrutiny and adequate independent testing of the auction and market design. ARB has also indicated that it will open a 45-day rulemaking in 2012 to address market readiness and market testing issues. SCE supports the decision to open a new rulemaking, and strongly urges ARB to begin this process as soon possible. Because market readiness is key to the success of this regulation, this new rulemaking should be completed well before the launch of the first allowance auction.

As part of the market testing and readiness rulemaking, ARB should re-evaluate the Allowance Reserve, which was designed to allow covered entities a means for cost containment. ARB staff has made several important revisions to the Allowance Reserve, including allowing allowances unsold at auction to be returned to the general market rather than into the Allowance Reserve. In the impending rulemaking, ARB staff should continue to improve the rule by identifying a means to refill the reserve in the event that it is stressed, or when at least one-third of the allowances it contains are sold. Electricity markets move and fluctuate rapidly, and it is critical that ARB develop an approach in advance of any adverse market event to refill the Allowance Reserve.

SCE looks forward to a collaborative process with ARB staff and stakeholders to design a cap-and-trade auction and market that limits gaming opportunities and the risk of another electricity crisis.

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[28] SCE December 2010 Comments, at 5-6.

VI.

ARB SHOULD CONTINUE IMPROVING THE OFFSET PROVISIONS TO PROVIDE SIGNIFICANT COST CONTAINMENT OPPORTUNITIES FOR REGULATED ENTITIES

A. The Offset Reversal Provisions Are Significantly Improved

SCE appreciates the improvements that ARB has made to the offset provisions of the regulation, particularly the increased overall clarity in the offset rules. SCE especially applauds the strengthening of the criteria by which ARB may invalidate offset credits that have already been validated.[29] Specifically, ARB has shortened the timeframe for offset invalidation from five years to three years for ozone-depleting substance projects.[30] In addition, ARB has allowed for a second verification to shorten the invalidation timeframe for projects created under the other three offset protocols.[31]

Section 95990, which addresses early action offset credit provisions, has been revised and much improved.[32] For example, the latest date that an early action offset project can be registered has been changed from January 1, 2013 to January 1, 2014.[33] In addition, ARB has modified the rules to allow GHG reductions that occur in 2014 under an early action protocol to be verified by September 30, 2015.[34]

ARB has also revised Section 95985 to create a clear process for determining which offsets have been invalidated and must be retired. SCE supports the provisions of Section 95985, which also identifies the responsible parties if an offset project overstates its

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[29] September 2011 Proposed Modifications, § 95985, at A-274 to A-294.
[30] September 2011 Proposed Modifications, § 95985(b)(1)(A), at A-279.
[31] September 2011 Proposed Modifications, § 95985(b)(1)(B), at A-279.
[32] September 2011 Proposed Modifications, § 95990, at A-303 to A-331.
[33] September 2011 Proposed Modifications, § 95985, at A-309.
[34] September 2011 Proposed Modifications, § 95985, at A-330.

GHG emissions reductions.[35] In addition, the replacement provisions are limited to only those offsets that have been retired.[36]

These revisions to the offset reversal provisions will provide market participants with increased certainty and liquidity, which will lead to additional opportunities for cost containment.

B. <u>Revisions to the Offset Provisions Should Ensure Robust Supply, Be Cost-Effective, Be High-Quality, and Ensure Offset Market Liquidity</u>

Because offsets are critical for cost containment, SCE continues to strongly support their use in the cap-and-trade program. SCE offers four essential principles that ARB staff should consider when reviewing and revising the offset rules:

- <u>Robust supply</u>. A strong supply of offsets, especially in the first years of the cap-and-trade program, will ensure that compliance entities are able to maximize their use of these important compliance instruments.
- <u>Cost-effectiveness</u>. High-quality but inexpensive offsets will allow compliance entities to limit their compliance costs, furthering the goals of the cap-and-trade program without unduly jeopardizing California economic vibrancy.
- <u>High-quality offsets.</u> High-quality offsets, mandatory for environmental integrity, will also ensure that the risk of invalidation does not overly constrict supply or raise prices in the offset market.
- <u>Offset market liquidity</u>. A liquid market with fungible products will provide an efficient way for the regulated community to access these high-quality and cost-effective offsets.

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35 September 2011 Proposed Modifications, § 95985, at A-279 to A-282.
36 *Id.*

SCE continues to be concerned about offset supplies in the first two compliance periods.[37] While the new shorter offset invalidation period will certainly help ensure a fungible market of high-quality offsets, any potential for invalidation may have the unintended effect of delaying the entry of offsets to market until they no longer have any risk of invalidation. Under the current rules, this time period is between three to five years. Accordingly, supply may be shifted from the first compliance periods – where it is already tight – to the later years of the program.

Given the regulatory interest in maintaining a secondary invalidation option, it is critical that ARB establish regulations that recognize and address this potential delay. As the current offset use limit is applied to each discrete compliance period, such a limited supply could prevent compliance entities from using offsets toward the full 8% of emissions reductions authorized in the regulation. This will significantly limit opportunities for cost containment. To address this problem, SCE again suggests two specific modifications to the offset provisions.

First, regulated entities should have the flexibility to use offsets up to 8% of reported emissions over the entire eight years of the cap-and-trade program. There is no environmental reason, nor any environmental benefit, to applying the 8% limit to discrete compliance periods. The global, long-term nature of climate change means that limiting the share of offsets within a particular compliance period is not environmentally relevant. As projects are gradually implemented under the four approved offset protocols, an increase in offset supply will likely come in the later years of the cap-and-trade program. To take advantage of this future expansion in supply, ARB should allow covered entities the flexibility to use offsets up to 8% of all reported emissions up to the time of offset submission. In doing so, ARB would be assured that the use of offsets would never exceed 8% of the entity's compliance obligation while affording flexibility to minimize the cost of compliance over the entire term of the cap-and-trade program. SCE proposes the following changes to the regulation language:

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[37] SCE August 11 Comments, at 43.

Section 95854. Quantitative Usage Limit on Designated Compliance Instruments – Including Offset Credits

(a) Compliance instruments identified in section 95820(b) and sections 95821 (b), (c), and (d) are subject to a quantitative usage limit when used to meet a compliance obligation.
(b) The total number of compliance instruments identified in section 95854(a) that each covered entity may surrender to fulfill the entity's compliance obligation ~~for a compliance period~~ must conform to the following limit:

O_o/S must be less than or equal to L_o

In which:

O_o = Total number of compliance instruments identified in section 95854(a) submitted since January 1, 2013 to fulfill the entity's total compliance obligation ~~for the compliance period~~ through the current compliance year.
S = Covered entity's total compliance obligation beginning January 1, 2013 through the current compliance year.
L_o = Quantitative usage limit on compliance instruments identified in section 95854(as), set at 0.08.

Second, SCE strongly urges ARB to work towards developing and approving additional offset protocols. SCE supports ARB's consideration of new protocols addressing replacement of high bleed pneumatic values and improved agricultural practices, as presented in a recent staff update on AB 32 climate change program activities.[38] Given the lengthy timeframes for offset project development, implementation and verification, SCE urges ARB to expeditiously consider and obtain Board approval of these and other new protocols in early 2012.

[38] *See* Public Hearing to Consider the AB 32 Scoping Plan and the Final Supplement to the AB 32 Scoping Functional Equivalent Document, August 24, 2011.

VII.

THE RPS ADJUSTMENT PROPERLY RECOGNIZES THE ROLE OF OUT-OF-STATE RPS RESOURCES

A. SCE Supports the RPS Adjustment

In Sections 95852(b)(1)(B)[39] and 95852(b)(4),[40] ARB introduced the concept of the "RPS Adjustment" to replace the earlier provisions on "replacement electricity." In previous comments, SCE strongly supported the concept of reducing a deliverer's compliance obligation by accounting for renewable imports, but identified a number of problems with the draft provisions addressing replacement electricity.[41] SCE supports the revised RPS Adjustment, which is a more simple and clear way for covered entities and their customers to receive credit for out-of-state renewable procurement that is eligible (although it may not be "directly delivered," as defined by ARB, to California) for the RPS program.

Under the new language, LSEs such as SCE will be allowed to receive GHG credit for out-of-state RPS resources, so long as the LSE importing electricity associated with an out-of-state RPS resource (1) has eligible contracts for the out-of-state RPS generator or an associated contract to import energy associated with that facility,[42] (2) retires renewable energy credits ("RECs") in the same year that the RPS adjustment is calculated,[43] and (3) is not in a linked jurisdiction.[44] This structure, for the most part, recognizes the role of out-of-state RPS resources to California by allowing for an RPS Adjustment which reduces an entity's overall GHG compliance burden.

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[39] September 2011 Proposed Modifications, § 95852(b)(4), at A-89.
[40] September 2011 Proposed Modifications, § 95852(b)(4), at A-91 to A-92.
[41] SCE August 11 Comments, at 21.
[42] September 2011 Proposed Modifications, § 95852(b)(4)(A)(1)-(2), at A-91 to A-92.
[43] September 2011 Proposed Modifications, § 95852(b)(4)(B), at A-92.
[44] September 2011 Proposed Modifications, § 95852(b)(4)(E), at A-92 to A-93.

B. A TL Factor Must Be Applied to the RPS Adjustment

As noted above, ARB has proposed a TL of 1.02 to imported electricity from unspecified and specified sources to account for transmission losses when it is measured at the first point of receipt in California rather than the busbar.[45] ARB has not included such a TL in the RPS Adjustment calculation.[46] Applying a TL factor to imported electricity implies that the emissions reported for replacement electricity (imported to satisfy RPS requirements), will be adjusted upwards by the TL. As with the QE Adjustment calculation, not applying the same TL factor to the RPS Adjustment will create an unfair inconsistency that could lead to unintended consequences. Without the TL, the RPS Adjustment will always be lower, by the 2% adjustment factor, than the GHG emissions calculated for imported RPS-eligible replacement electricity. Because the GHG emissions credit calculated as the RPS Adjustment should completely offset the GHG emissions of the imported electricity that qualifies for the RPS Adjustment, ARB should apply the TL factor to the RPS Adjustment.

VIII.

SCE SUPPORTS THE MODIFICATIONS TO THE RESOURCE SHUFFLING PROVISIONS

In Section 95802(a)(251), ARB revised the definition of "Resource Shuffling," removing two hypothetical situations where delivery of electricity to the California grid could be considered resource shuffling.[47] In addition, ARB has removed the unnecessary use of the term "fraud" in Section 95852(b)(2).[48] SCE agrees with the changes, and thanks ARB staff for responding to SCE's concerns. The scenarios were too broadly written and could too easily encompass situations where a covered entity was either (1) acting for valid economic dispatch

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[45] Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, §§ 95111(b)(1)-(2).

[46] September 2011 Proposed Modifications, § 95852(b)(4), at A-91 to A-93.

[47] September 2011 Proposed Modifications, § 95808(a)(251), at A-44 to A-45.

[48] September 2011 Proposed Modifications, § 95852(b)(2), at A-90.

reasons, or (2) engaging in activities that resembled resource shuffling with no intent to circumvent emissions regulations.

IX.

CONCLUSION

ARB staff should be recognized for their hard work in crafting the cap-and-trade regulation and for working with stakeholders to improve each new version of the cap-and-trade rules. SCE urges ARB to revise the regulation as outlined above in order to prevent markets from suffering unintended consequences. SCE looks forward to working with ARB staff again in the upcoming market readiness rulemaking to further refine these rules in order to ensure a workable program that will effectively reduce GHG emissions in accordance with the goals of AB 32.

Respectfully submitted,

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September 27, 2011

Appendix A

Qualified Exports Adjustment Example: How to Apply SCE's Proposal