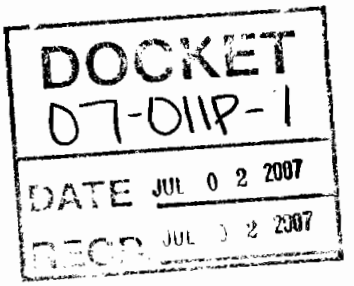
BEFORE THE PUBLIC UTILITIES COMMISSION
AND THE ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Implement the Commission's Procurement Incentive Framework and to Examine the Integration of Greenhouse Gas Emission Standards into Procurement Policies.	Rulemaking 06-04-009 (Filed April 13, 2006)
Order Instituting Informational Proceeding – AB 32.	CEC Docket No. 07-OIIP-01



SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY COMMENT ON JOINT CALIFORNIA PUBLIC UTILITIES COMMISSION AND CALIFORNIA ENERGY COMMISSION STAFF PROPOSAL FOR AN ELECTRICITY RETAIL PROVIDER GHG REPORTING PROTOCOL

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Dated: July 2, 2007

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In accordance with the June 12, 2007 Administrative Law Judges' Ruling Regarding Comments on Staff Reporting Proposal ("Ruling"), the Southern California Public Power Authority ("SCPPA") respectfully submits this comment on the "Joint California Public Utilities Commission and California Energy Commission Staff Proposal for an Electricity Retail Provider Greenhouse Gas ("GHG") Reporting Protocol" ("Staff Proposal").

SCPPA commends the staffs ("Joint Staff") of the California Public Utilities Commission ("CPUC") and the California Energy Commission ("CEC") (jointly, "Commissions"). Their preparation of the Staff Proposal should greatly assist the CPUC and CEC in developing a joint recommendation for presentation to the California Air Resources Board ("CARB") in September 2007. Particularly, SCPPA commends the Joint Staff for their identification of the criteria to be considered in the course of determining the final recommendation to CARB: accuracy, consistency, simplicity, transparency, minimum of unintended consequences,

setting appropriate policy signals, and expandability. *See* Staff Proposal at 6-8. SCPPA supports the criteria presented by the Joint Staff, particularly, and SCPPA applauds the Joint Staff's decision to put the objective of accuracy first on the list.

This Comment is confined to addressing several specific issues that particularly concern SCPPA. In accordance with the admonition in the Ruling, this Comment is organized to follow the outline used in the Staff Proposal. SCPPA recommends that the CPUC and the CEC make the following revisions to the Staff Proposal in preparing the Commissions' recommendation to CARB:

(1) Eliminate section 4.1.4, Facility Specific Contracts. The section erroneously assumes that reports of emissions from specified low- or zero-GHG plants could lawfully be treated as "claims" to plants that could be accepted or rejected by either CARB or the Commissions.

(2) Revise section 5.3.3, Marginal Emission Factors for Residual Unspecified Power, so as to provide that the "marginal method" should be applied rather than the "hybrid method" to develop the default factor for unspecified purchases from the Northwest.

(3) Revise section 7.3.2, Generation and Associated Emissions from Specified Sources, to make it clear that retail providers will be required to report emissions associated with specified purchases from out-of-state plants on the basis of actual energy received from the plant plus emissions associated with line losses.

I. SECTION 4.1.4, FACILITY-SPECIFIC CONTRACTS: REPORTS ON DELIVERIES UNDER FACILITY-SPECIFIC CONTRACTS SHOULD NOT BE TREATED AS "CLAIMS" TO THE FACILITIES THAT COULD BE ACCEPTED OR REJECTED.

The Joint Staff suggest in Section 4.1.4 of the Staff Proposal that retail provider reports of GHG emissions from plants under facility-specific contracts could be construed as being more

than mere reports. The Joint Staff suggest that reports regarding "low- or zero-GHG plants" could be construed as being "claims" to the plants. Staff Proposal at 11. The Joint Staff suggest, further, that a retail provider's reports on emissions from "existing low- or zero-GHG plants" could be construed as being "new claims" if the retail provider had not reported emissions from the plant previously. The Joint Staff say that such "new claims" should "be treated with some skepticism," implying that the "new claims" could be rejected. *Id*. The Joint Staff do say, however, that "claims to generation from new facilities should be allowed, at least in some circumstances." *Id*. at 12.

The Joint Staff fail to identify any authority that would permit CARB or any other state agency to regard retail provider reports on GHG emissions as being "claims" on "low- or zero-GHG plants" or to accept or reject such supposed "claims."

A. AB 32 Fails to Provide CARB with Any Authority to Treat Retail Provider Emission Reports as Being "Claims" to Plants.

Assembly Bill ("AB") No. 32, the California Global Warming Solutions Act of 2006, does not provide any authority for CARB or any other state agency to treat retail provider emission reports as being "claims" to plants.

Section 38530 of the Health and Safety Code as established in AB 32 provides that on or before January 1, 2008, CARB "shall adopt regulations to require the reporting and verification of statewide [GHG] emissions …." The required reporting shall "[a]ccount for [GHG] emissions from all electricity consumed in the state, including transmission and distribution line losses for energy generated within in the state or imported from outside the state." Health and Safety Code § 38530(b)(2).

There is no suggestion in section 38530 as established in AB 32 that CARB or any other agency may discriminate between reports on gas emissions at an *existing* low- or zero-GHG

plants and reports on emissions at *new* low- or zero-GHG plants, with some reports being accepted and others being rejected on the basis of the vintage of the plant. Likewise, there is no suggestion in section 38530 that CARB is authorized to accept or reject a retail provider's reports on the basis of whether the retail provider had previously submitted reports on emissions from the plant.

It is self-evident from the face of the Staff Proposal that the Joint Staff are attempting to construct a regulatory feature that could be used to prevent what the Joint Staff regard as being "contract shuffling": "Staff proposes that claims on existing sources meet certain conditions in order to mitigate the potential for contract shuffling by California retail providers." Joint Proposal at 11. However, section 38530 does not address "contract shuffling," nor does any other provision of AB 32. The Joint Staff's proposed construct as suggested in section 4.1.4 of the Staff Proposal may be a useful new feature to add to the AB 32 regulatory scheme in the Joint Staff's view, but it goes beyond the authority granted to CARB or any other agency in AB 32.

B. Accepting Some Retail Provider Reports on Emissions and Rejecting Others on the Bases Suggested in Section 4.1.4 of the Staff Proposal Would Be Inconsistent with the Objective of the Reporting Requirements that Are To Be Established Under AB 32.

The acceptance of some retail provider reports on emissions and the rejection of others on the bases suggested in section 4.1.4 of the Staff Proposal would be inconsistent with the objective of the reporting requirements that are to be established under AB 32. Section 38530 requires that CARB establish regulations that "require the reporting and verification of statewide GHG emissions. The purpose of the new reporting requirements is to "[a]ccount for [GHG] emissions from all electricity consumed in the state, including transmission and distribution line losses for energy generated within in the state or imported from outside the state." Health and

Safety Code § 38530(b)(2). If some retail provider reports were subject to being rejected as "claims" on the bases suggested by the Joint Staff, some emissions associated with electricity consumed within the state would go uncounted. That would be inconsistent with the intent of the legislature in enacting section 38530.

C. Accepting Some Retail Provider Reports on Emissions and Rejecting Others on the Bases Suggested in Section 4.1.4 of the Staff Proposal Would Be Inconsistent with the Joint Staff's Objective of Accuracy.

The purpose of the reporting protocols that are proposed in the Staff Proposal is to facilitate "monitoring greenhouse gas (GHG) emissions associated with serving California's retail load." Staff Proposal at *vi*. "The proposal recommends that retail providers identify power received from owned facilities and other specified sources, so that emissions from individual plants can be accurately allocated." *Id.* The first and paramount objective for a reporting protocol is accuracy: "To the extent possible, the reporting protocol should be designed to produce an accurate estimate of the GHG emissions that result from the consumption of electricity in California, at both the retail provider level and the statewide level." Staff Proposal at 6-7.

The Joint Staff's objective of obtaining "an accurate estimate of the GHG emissions that result from the consumption of electricity in California" would be thwarted if some retail provider reports were rejected as being impermissible "claims" to plants. Some emissions would go uncounted.

Insofar as the suggested treatment of retail provider emission reports as "claims" to certain plants lacks any legal basis and is inconsistent with the objective of the reporting provisions of AB 32 as well as the Staff Proposal, SCPPA recommends that section 4.1.4 be omitted from the Commissions' final recommendation on reporting protocols to CARB.

II. SECTION 5.3.3, MARGINAL EMISSION FACTORS FOR RESIDUAL UNSPECIFIED POWER: THE JOINT PROPOSAL SHOULD USE A MARGINAL METHOD FOR DETERMINING EMISSION FACTORS FOR UNSPECIFIED POWER FROM BOTH THE SOUTHWEST AND THE NORTHWEST.

The Joint Staff propose to develop default CO_2 emission factors for purchases from Northwest and Southwest unspecified resources. A "marginal method" would be used to establish the default factor for unspecified purchases from the Southwest: "Once specified and claimed resources are identified (both those claimed by California entities and those claimed by entities in other states), the marginal method would assign a regional average based on the historic and future probable dispatch of the region." Joint Proposal at 18. Based on the "marginal method," the Joint Staff develop a default factor for the Southwest of 1,075 lbs/MWh:

> For the 29% of Southwest contracts which are unspecified, the characterization would be 90% natural gas and 10% coal. Using reported fuel use and energy produced, staff estimated actual Southwest natural gas in 2005 to have an emissions factor of 951 lbs/MWh. Coal had a factor of 2,146 lbs/kWh. This yields a weighted average emissions factor of 1,075 lbs/MWh.

Joint Proposal at 19.[1] Insofar as the "marginal method" would develop a default factor that assumes that unspecified facilities that operate at a lower variable cost are used first to serve native load in the region in which the facilities are located, the marginal method appears to be appropriate.

However, the Joint Staff do not apply the "marginal method" to developing the default factor for the Northwest. Instead, the Joint Staff propose to use a "hybrid method" that is based upon "marginal analysis and sales assessments" for the Northwest: "This paper describes a

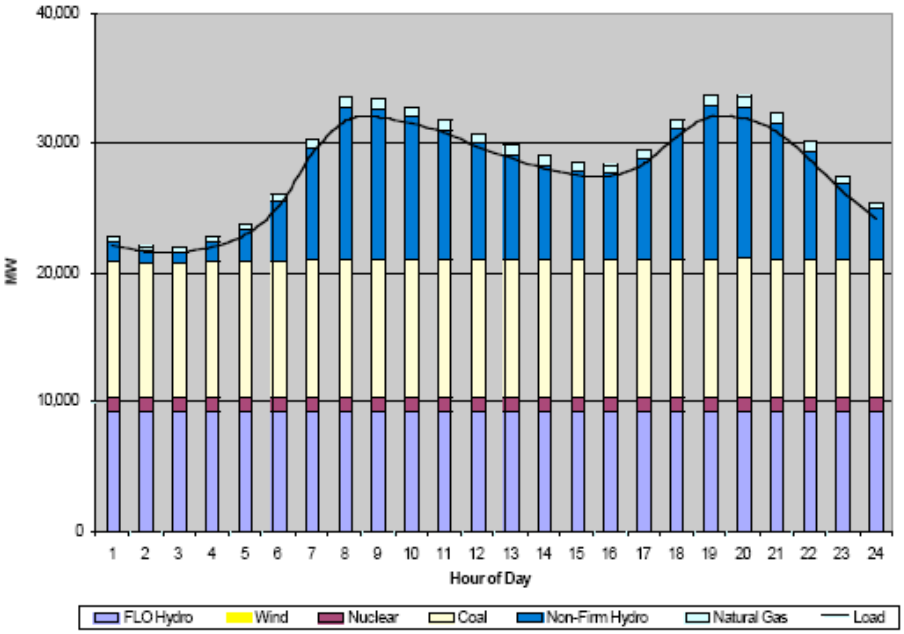
[1] The "Revised Methodology to Estimate the Generation Resource Mix of California Electricity Import" ("Revised Methodology") that was presented by Al Alvarado and Karen Griffin at the CPUC/CEC Workshop held April 12, 2007, in San Francisco, stated: "For the Southwest, the unspecified imports would be allocated to 4 percent coal and 96 percent natural gas." Revised Methodology at 2 (Mar. 2007). The Joint Staff fail to explain why they use a 90/10 split in the Staff Proposal rather than the 96/4 split that was proposed in the Revised Methodology.

method that allocates the unspecified resources based on a marginal generation analysis for the Southwest and on a hybrid method of marginal analysis and sales assessments for the Northwest." Joint Proposal at 18. The Joint Staff claim that using the marginal method for the Southwest but using the "hybrid method" for the Northwest would have the advantage of recognizing "the role of Northwest hydro power as a key swing resource for Northwest sales." Staff Proposal at 18. The result of using the "hybrid method" for the Northwest is a default factor of 419 lbs/MWh: "For the 88% of Northwest imports which are unspecified, the characterization would be 66% hydro, 9% coal, 2% nuclear, 22% natural gas, and 1% renewables. This produces a Northwest default emissions factor of 419 lbs CO_2 /kWh." Staff Proposal at 19.

A marginal analysis should be used for the Northwest just as it is for the Southwest. The short run marginal (variable) cost of both coal-fired generation and gas-fired generation is higher than the marginal cost of hydroelectric generation. Thus, both coal-fired and gas-fired generation should be assumed to be exported to California from the Northwest ahead of non-firm hydroelectric generation.

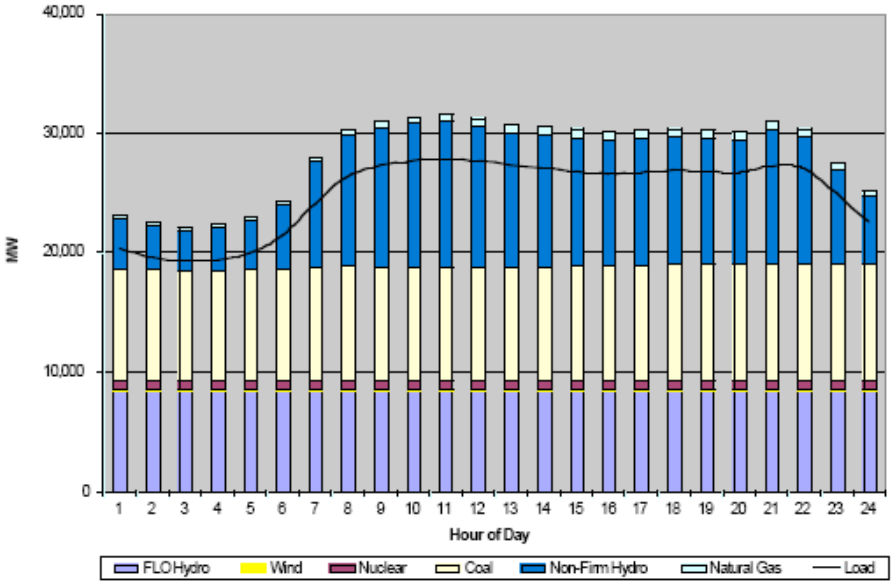
The Joint Staff err in assuming that non-firm hydro is exported to California ahead of coal. Their error is illustrated by figures 4 through 7 from the "Revised Methodology to Estimate the Generation Resource Mix of California Electricity Import" ("Revised Methodology") presented by Al Alvarado and Karen Griffin at the CPUC/CEC Workshop held April 12, 2007, in San Francisco. The figures are as follows:

Figure 4: Load and Resources PNW-U.S. Portion Only Quarter 1, 2007



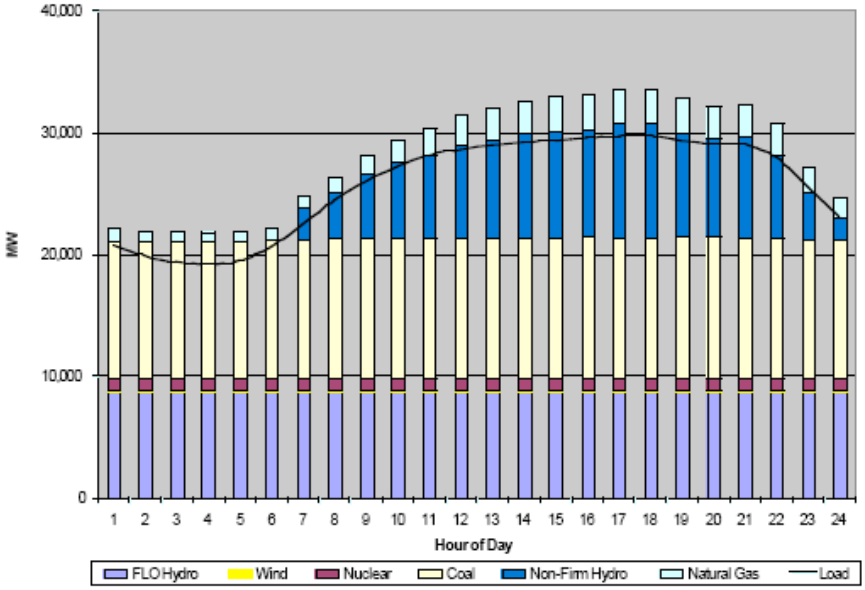
Source: Global Energy Decisions & BPA

Figure 5: Load and Resources PNW-U.S. Portion Only Quarter 2, 2007



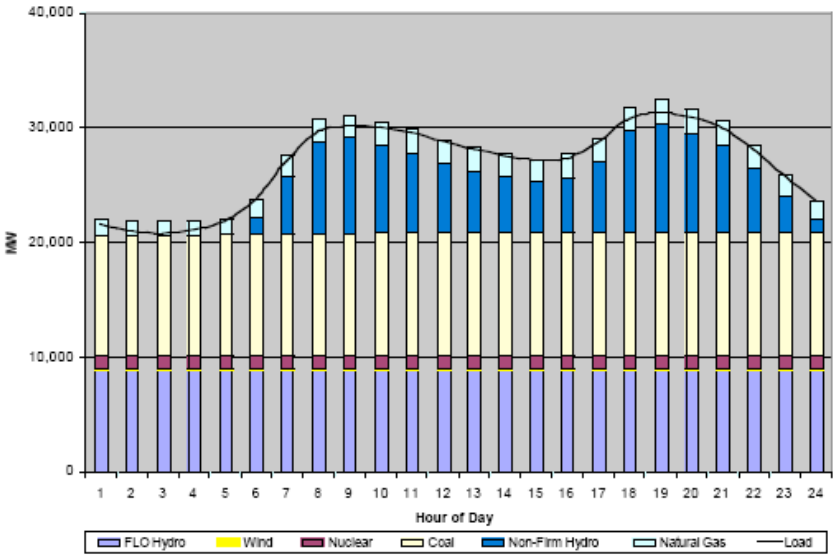
Source: Global Energy Decisions & BPA

Figure 6: Load and Resources PNW-U.S. Portion Only Quarter 3, 2007



Source: Global Energy Decisions & BPA

Figure 7: Load and Resources PNW-U.S. Portion Only Quarter 4, 2007



Source: Global Energy Decisions & BPA

The bars on the graphs should be stacked in order of marginal cost with both coal generation and gas generation being stacked *above* non-firm hydro generation. However, the bars representing coal are stacked *below* the bars representing non-firm hydro.

Stacking the Northwest generation resources in the sequence of marginal operating costs would recognize that, if the interties with California were not available, the Northwest would use its nonfirm hydro to meet its own load and take gas and coal units out of service. That would be cost-minimizing behavior. With the presence of the interties, if California is willing to pay an amount that exceeds the incremental costs of thermal generation, Northwest utilities are willing to operate these units and sell the output. In so doing, the Northwest operates its above-critical-year hydro first to meet native loads, displacing coal-fired generation, and offers the coal-fired generation to the market.

If the erroneous sequencing of coal and non-firm hydro were corrected, the default factor for the Northwest would reflect "the historic and future probable dispatch of the region" similar to the default factor for the Southwest. The Northwest default factor would, as a result, be substantially higher than the 419 lbs/kWh proposed in the Joint Proposal.

A. Applying the Marginal Method to Develop the Default Factor for Unspecified Imports from the Northwest Would Eliminate Double-Counting of Non-Firm Hydro by the Northwest and California.

Aside from being correct, applying the marginal method to the Northwest would resolve several problems. First, it would eliminate double counting of non-firm hydro by the Northwest and California. SCPPA understands that is a dispute between Oregon and Washington on the one hand and California on the other about the treatment of non-firm hydro, although "Washington and Oregon are willing to work with California to sort out claims and to separate out California sales from the sales to the rest of the Northwest." Staff Proposal at 20. Currently, *both* Oregon/Washington *and* California are trying to count the Northwest non-firm

hydro in their GHG emissions resource mix. The CEC Staff recognized the "potential for double counting" in the Revised Methodology. Revised Methodology at 28.

At some point, the double counting of hydro by Oregon/Washington and California must be addressed. Insofar as the non-firm hydro originates in the Northwest, it would be appropriate to regard this low-cost resource as being economically dispatched to serve Northwest native load, just as the Joint Staff find that coal is dispatched predominantly in the Southwest to serve Southwest native load. Joint Proposal at 18. That would eliminate the double counting. It would be preferable to eliminate the double counting now instead of allowing the problem to persist into the future.

B. Applying the Marginal Method to Develop the Default Factor for Unspecified Imports from the Northwest Would Tend to Resolve the Potential Discrepancy Between *Ex Ante* Default Factors and *Ex Post* Default Factors.

Second, applying the marginal method to the Northwest would tend to resolve the potential discrepancy between *ex ante* default factors for the Northwest and *ex post* factors. The Joint Staff point out that although they recommend *ex ante* assigning of emission factors to unspecified purchases in order to provide "market certainty," *ex post* factors would be more accurate:

> If set before the year, parties will know the assigned carbon factor of any transactions they make, providing greater certainty regarding the total costs of power purchased. However, the greater certainty afforded by an ex ante approach comes at the expense of some accuracy in the factor, which will be set based on older information. While ex post tabulations of emissions would be based on actual generation data, ex ante factors would not.

Joint Proposal at 13-14.

Under the Joint Staff approach, *ex post* emission factors for the Northwest could vary dramatically from *ex ante* factors depending upon hydro conditions: "The ex ante emission factors may underestimate or overestimate emissions in a given year if hydro conditions vary

significantly from long-term averages." Staff Proposal at 21. If the marginal method were used for the Northwest, gas and coal would at nearly all times determine both the *ex post* default factor as well as the *ex ante* factor. This would tend to reduce the potential for a discrepancy between *ex ante* factors and *ex post* factors for the Northwest.

C. Applying the Marginal Method to Develop the Default Factor for Unspecified Imports from the Northwest Would Tend to Eliminate the Need for Time of Day or Seasonal Adjustments to the Northwest Default Factor.

Third, use of the marginal methodology to develop the default factor for the Northwest would tend to eliminate the need for time of day or seasonal adjustments. Use of the "hybrid method" for the Northwest may require time of day or seasonal adjustments to reflect greater or lesser reliance upon non-firm hydro in the resource mix for unspecified exports to California. The Joint Staff state that time of day and seasonal adjustments are "probably not needed if a marginal emission factor" were determined for the Northwest as it would be for the Southwest. SCPPA agrees. If a default factor based upon a combination of gas and coal were developed for the Northwest, there should be little need for time of day or seasonal adjustments of the Northwest default factor.

D. Applying the Marginal Method to Develop the Default Factor for Unspecified Imports from the Northwest Would Reduce the Concern that There Would Be Crossover Between the Northwest and the Southwest.

Applying the marginal method to the Northwest would reduce the concern that there might be "cross-over" between the Northwest and the Southwest. The Joint Staff explain the concern about "cross-over" as follows:

> Some parties are concerned that there could be cross-over between the Northwest and Southwest; i.e., sellers might resell power from one region in such a way that the seller claims it comes from one region but actually dispatches from the other. This did occur during the 2000-2001 energy crises, and parties may be concerned that sufficiently different regional profiles could induce such contract shuffling and misrepresentation.

Staff Proposal at 15. "For example, a high-emitting unit could sell its power to the California-Oregon Border hub, and then claim that its power should be given the lower Northwest regional default value." Staff Proposal at 36. If the "hybrid method" were used to develop the default factor for the Northwest and resulted in a default factor that is significantly lower than the default factor for the Southwest, "[m]monitoring will be needed to verify whether contract shuffling is occurring at the Northwest hubs." *Id.* at 19.

The concern about "cross-over would be reduced if the marginal method were used for the Northwest as well as the Southwest. Under the marginal method, the Northwest default factor would be based on coal and gas. Thus, the Northwest default factor would not be below the Southwest factor.

For these reasons, SCPPA recommends that the CPUC and CEC craft a recommendation to CARB that utilizes the marginal method for determining the default factor for *both* the Northwest and the Southwest.

III. SECTION 7.3.2, GENERATION AND ASSOCIATED EMISSIONS FROM SPECIFIED PURCHASES: RETAIL PROVIDERS SHOULD NOT BE REQUIRED TO REPORT EMISSIONS-ASSOCIATED PERCENTAGE OWNERSHIP SHARES OF OUT-OF-STATE PLANTS.

The Joint Staff propose that for specified purchases from out-of-state power plants, a retail provider "should show the facility's net generation, fuel consumption data for each fuel from EPA Part 75, the heat content factor for each fuel, the emissions factors in KG/MMBtu for each fuel, the oxidation factors for each fuel, and the total metric tons of CO_2, CH_4, and NTO emitted." Staff Proposal at 29. After providing that data for the entire facility, "the retail provider should adjust total emissions for its share of net generation purchased." *Id.*

SCPPA is unclear what is meant by the phrase, "share of net generation purchased." If that phrase is intended to mean that the retail provider should adjust total emissions of the

facility to reflect the retail provider's percentage "ownership share" in the output of the plant, the Staff Proposal should be revised.

Retail providers should not be required to report emissions based upon a contractually-established percentage right to the output of a plant. Under section 38530 of the Health and Safety Code as established through AB 32, the purpose of the regulations that are to be promulgated by CARB by January 2008 is to "account for [GHG] emissions from all electricity consumed in the state, including transmission and distribution line losses from electricity generated within the state or imported from outside the state." If retail providers' reports were based on percentage shares of facilities without regard to actual deliveries of energy, the reporting methodology would be inconsistent with the objective of section 38530. The reports would not provide data on the emissions associated with the electricity that is actually consumed in California.

In order to be consistent with the objective of accounting "for [GHG] emissions from all electricity consumed in the state," the reporting of emissions must be on the basis of actual deliveries of energy plus associated line losses from a specified out-of-state resource.
The Joint Proposal should be revised to require that, for specified purchases from out-of-state plants, a retail provider should report the total emissions associated with energy received in California from the plant plus associated line losses.

IV. CONCLUSION.

For the reasons set forth above, SCPPA recommends that the CPUC and the CEC make the following revisions to the Staff Proposal in preparing the Commissions' recommendation to CARB:

(1) Eliminate section 4.1.4 insofar as the section erroneously assumes that reports of emissions from specified low- or zero-GHG plants could lawfully be treated as "claims" to the plants that could be accepted or rejected by either CARB or the Commissions.

(2) Revise section 5.3.3 to provide that the "marginal method" should used rather than the "hybrid method" to develop the default factor for unspecified purchases form the Northwest.

(3) Revise section 7.3.2 to make it clear that retail providers will be required to report emissions associated with specified purchases from out-of-state plants on the basis of actual energy received from the plant plus emissions associated with line losses.

Respectfully submitted,

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Attorney for the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY**

Dated: July 2, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the **SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY COMMENT ON JOINT CALIFORNIA PUBLIC UTILITIES COMMISSION AND CALIFORNIA ENERGY COMMISSION STAFF PROPOSAL FOR AN ELECTRICITY RETAIL PROVIDER GHG REPORTING PROTOCOL** on the service list for CPUC Docket No. R.06-04-009 and CEC Docket No. 07-OIIP-01 by serving a copy to each party by electronic mail and/or by mailing a properly addressed copy by first-class mail with postage prepaid to the party/ies indicated in the Administrative Law Judges' Ruling Regarding Comments on Staff Report Proposal dated June 12, 2007.

Executed on July 2, 2007, at Los Angeles, California.

/s/ Rosemarie F. McBride

Rosemarie F. McBride

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