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By E-Mail and Electronic Submission (<http://www.arb.ca.gov/lispub/comm/bclist.php>)

Hon. Mary D. Nichols, Chairman
California Air Resources Board
1001 I Street
Sacramento, CA 95814

Re: Proposed 15-Day Modifications to the Proposed Amendments to the Regulation
for the Mandatory Reporting of Greenhouse Gas Emissions

Dear Madame Chairman:

Calpine Corporation ("Calpine") appreciates the opportunity to provide these comments on the California Air Resources Board's ("CARB") Proposed 15-Day Modifications (hereinafter, "15-Day Modifications") to the Proposed Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, California Code of Regulations ("Cal. Code Reg."), tit. 17, sections ("§§") 95100 *et seq.* ("Mandatory Reporting Rule" or "MRR").

I. INTRODUCTION AND SUMMARY OF COMMENTS

Calpine is a long-time advocate for low-carbon and renewable energy resources and has consistently supported state and federal carbon legislation. As a recognized leader in environmentally responsible power generation, Calpine has 5,800 megawatts ("MW") of operating electric generating capacity in California. As owner and operator of 725 MW of geothermal energy at The Geysers, Calpine is also California's largest renewable energy provider, supplying approximately 22% of the state's current renewable power. We also own and operate the state's largest fleet of combined heat and power facilities. Since 2001, Calpine has invested more than \$5 billion to add more than 4,000 MW of clean, efficient new generating capacity. Calpine is currently constructing a 620-MW combined-cycle natural gas-fired power plant in Hayward, which will be the first power plant subject to a limitation on its emissions of greenhouse gases ("GHG") in its federal air permit, and is converting an existing simple-cycle power plant in San Jose into a highly efficient 309-MW combined-cycle power plant. Together, these two projects will create hundreds of union construction jobs and amount to well over \$1 billion in investment in state-of-the art, low-emitting electric generating resources.

Calpine would like to commend Chair Nichols, the CARB Board Members, and staff for their continued efforts to work with stakeholders since the Board's approval of the Proposed Cap-and-

Trade Regulation (proposed Cal. Code Reg., tit. 17 §§ 95800 *et seq.*) and Proposed Amendments to the MRR this past December. Calpine seeks to work cooperatively with CARB to ensure the Cap-and-Trade program's success and viability and we offer the following summary of our comments on the 15-Day Modifications to the MRR, with a detailed discussion of these comments at Section II below:

- As drafted, the registration requirements for specified sources of imported electricity with emissions below the default rate suggest that imported power may only be reported at a lower rate if delivered in quantities no greater than were reported for calendar year 2009. Calpine is concerned that these requirements would work in tandem with the Proposed Cap-and-Trade Regulation's prohibition on "resource shuffling" to create a strong disincentive against future sales to California from Calpine's low-emitting out-of-state resources. Calpine does not believe CARB should preclude reporting of increased deliveries of power from these resources at their actual emissions rate. Indeed, a well-designed cap-and-trade program should incentivize dispatch from the lowest carbon resources, regardless where they are located. Thus, the Proposed Amendments should be revised to clarify that electric power entities that did not report imported power as a specified source for calendar year 2009 may be registered as a specified source and may report their emissions from such sources at lower than the default rate, both for increased deliveries of power to California and for sales of power pursuant to new contracts.
- The default emissions factor for unspecified power imported into California is too low and would disfavor more efficient specified imports and in-State generating sources.
- The applicability provisions unintentionally exclude electric generating facilities exempt from the Acid Rain Program from the reporting requirements of the MRR, even though such facilities will be subject to a compliance obligation under the Proposed Cap-and-Trade Regulation.
- The Proposed Amendments would allow CARB to elevate even an innocuous and inadvertent reporting violation with no demonstrable environmental consequences into an enforcement action that could result in potential civil penalties in literally the trillions of dollars, depending upon where a misplaced decimal point should fall. Errors are likely to occur upon implementation of a whole new regulatory program. Calpine is concerned that, by classifying each day that a report is inaccurate or late and each ton of emissions that is under-reported as a separate violation, the Proposed Amendments may constrain CARB's enforcement discretion to seek penalties proportional to the nature of the alleged violation and its resulting harm, even for relatively minor violations with no demonstrable harm. Accordingly, Calpine is proposing changes to assure that CARB retains the discretion provided by the relevant statutory provisions.

II. DISCUSSION

A. The Proposed Amendments Should Be Revised To Clarify The Requirements For Registration and Reporting Of Specified Sources of Power With Emissions Lower Than The Default Rate For Imported Electricity

The 15-Day Modifications would require specified sources of electricity to provide certain “Additional Information” in support of each claim to a specified source of electricity with an emissions rate lower than the default emissions rate for imported electricity.

- For electricity that has historically been consumed in California, the reporting entity must indicate whether the “[s]pecified source of electricity has been reported in a 2009 verified data report and is claimed for the current data year by the same electricity importer, based on a written power contract or status as a [generation providing entity (“GPE”)] in effect prior to January 1, 2010 that remains in effect, or that has been renegotiated for the same facility or generating unit for up to the same share or quantity of net generation within 12 months following prior expiration.” Proposed Cal. Code Reg. tit. 17, § 95111(g)(4)(A).
- For deliveries from new facilities and existing facilities with additional capacity, the reporting entity must indicate whether the specified source is first registered as such with CARB within 12 months of commercial operation or an increase in the facility’s generating capacity due to increased efficiencies or other capacity increasing actions. *See id.*, § 95111(g)(4)(D)-(E).

According to the notice, these new “specification options for claims to specified source deliveries” “will assist entities trying to report within the bounds of the resource shuffling limitations in the Cap-and-Trade Regulation, and inform the verification process.” Notice of Public Availability of Modified Text and Availability of Additional Documents, Public Hearing to Consider Amendments to the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (“Notice”), 8.

Calpine believes that the 15-Day Modifications should be revised to clarify that these new specification options do not prevent electric power entities from registering a source of specified power with an emissions rate lower than the default rate, even if imports from the source were not reported as specified power for calendar year 2009. In the final rulemaking package, CARB should also clarify two things: (i) that it does not intend, through the MRR and Cap-and-Trade Regulation’s prohibition on resource shuffling, to prevent electric power entities from reporting emissions from increased annual deliveries of power from specified sources (*i.e.*, more MWh delivered to California) using the established lower rate; (ii) that such sources may be registered and their emissions reported using the lower rate without running afoul of the prohibition on resource shuffling, even if power is sold to California pursuant to a newly executed contract.

Under the Proposed Amendments to the MRR, so long as an electricity importer registers its anticipated specified sources with CARB “prior to February 1 following each data year”, it may

report its emissions from imported electricity at a rate lower than the default emissions rate. *See* Proposed Cal. Code Reg. tit. 17, § 95111(g)(1). Thus, regardless whether or not the importer had registered and reported its emissions as specified power for 2009, it should be able to report 2011 emissions at a specified rate, so long as it registers its anticipated specified sources by February 1, 2012. However, we are concerned that, in establishing these new specification options, CARB appears to be suggesting that, to register as a specified source and report emissions using a lower rate than the default rate for imported electricity without violating the resource shuffling prohibition, a reporting entity must satisfy at least one of the conditions set forth at proposed Section 95111(g)(4).

Calpine operates two highly efficient combined-cycle natural gas-fired generating facilities located outside of California that frequently sell power into California on the day-ahead market, in Hermiston, Oregon and South Point, Arizona. Neither of these facilities has previously reported its sales of power to California as specified power; rather, Calpine Energy Services (the reporting entity that actually imports power to California from these facilities) has thus far reported imports from these facilities, along with all other imports to California, as unspecified power. In the future, Calpine would like to register these two facilities as specified sources, given that their emissions are below the default emissions rate proposed for unspecified electricity. Calpine is concerned that, by suggesting that existing sources must have reported as a specified source of power in 2009 and may only report “up to the same share or quantity of net generation” under existing contracts (proposed § 95111(g)(4)(A)), the Proposed Amendments could be interpreted to prevent Calpine from claiming an emissions rate lower than the default rate for imports from these facilities without running afoul of the Proposed Cap-and-Trade Regulation’s resource shuffling prohibition, when in fact specifying power from these facilities would more accurately reflect emissions from power imported to California. We are separately commenting on the Proposed Cap-and-Trade Regulation’s resource shuffling prohibition to assure that the MRR and Cap-and-Trade Regulation do not create disincentives against purchase of power from these facilities for delivery into California and thereby disfavor lower emitting out-of-state resources.

We do not believe CARB intends for the requirements for registration of specified sources and the prohibition on resource shuffling to create such disincentives. Indeed, the entire goal of a well designed cap-and-trade regime should be to incentivize increased dispatch from the lowest carbon resources, regardless where they are located. Calpine has been and remains a strong supporter of CARB’s rulemaking efforts in part because it anticipates that, by putting a price on carbon emissions, the Cap-and-Trade Regulation could result in increased sales of power to California from its fleet of gas-fired sources, including at times when, under current market conditions, they may not be operated due to the disparity between the price of coal and natural gas. Further, the mere fact that out-of-state facilities such as Hermiston and South Point might deliver power to California more frequently in the future would provide no evidence to support the conclusion that higher emitting power previously supplied to California is now being delivered elsewhere to jurisdictions not linked through the Western Climate Initiative. The implementation of the Cap-and-Trade Regulation is intended to send price signals to increase the use of highly efficient natural gas resources, instead of higher emitting coal-fired facilities. If

facilities such as Hermiston and South Point are forced to remain unspecified this would not be accomplished. As detailed in our comments on the proposed 15-day modifications to the Proposed Cap-and-Trade Regulation, Calpine is concerned that the definition of resource shuffling could be interpreted too broadly and thereby act as a strong disincentive against future dispatch and contracting of Calpine's low emitting out-of-state resources.

To avoid these disincentives and assure that importers of low emitting power to California can claim an appropriate emissions rate for such imports, CARB should clarify that the conditions set forth at Section 95111(g)(4) do not represent mandatory requirements for reporting of specified sources in accordance with the Cap-and-Trade Regulation's prohibition on resource shuffling. CARB should also clarify that facilities that did not report as a specified source in 2009 may nevertheless be registered as a specified source at this time and that increased deliveries to California from these facilities (increases in MWh per year from historic levels), including under newly executed contracts, are not precluded from being reported with an emissions rate lower than the default rate. Calpine is separately suggesting corresponding changes to the Proposed Cap-and-Trade Regulation and proposes the following clarifications to the 15-Day Modifications to the MRR, with our insertions shown in underlined text.

§ 95911. Data Requirements and Calculation Methods for Electric Power Entities.

....

- (g) *Requirements for Claims of Specified Sources of Imported Electricity and Associated Emissions...*

...

- (4) Additional Information for Specified Sources. For each claim to a specified source of electricity, the electricity importer must indicate whether one or more of the following conditions applies. The following conditions are not requirements for registration as a specified source. Nor are they intended to suggest that electric power entities reporting emission from specified sources that do not qualify under one of the following conditions are in violation of the resource shuffling prohibition appearing at Section 95852 of this title 17.
- (A) Electricity historically consumed in California. Specified source of electricity has been reported in a 2009 verified data report and is claimed for the current data year by the same electricity importer, based on a written power contract or status as a GPE in effect prior to January 1, 2010 that remains in effect, or that has been renegotiated for the same facility or generating unit for up to the same share or quantity of net generation within 12 months following prior expiration. When imported electricity from a specified facility reported in a 2009 data report is greater than 80 percent of net generation that year, any subsequent GPE for the facility or purchasing-selling entity with a written power contract may claim it as a specified source for up to the full amount of net generation measured at the busbar in the current data year. Notwithstanding the foregoing, a

specified source may be registered even if it was not reported as specified power for 2009. Nothing in this paragraph (A) is intended to prevent electric power entities from reporting emissions from increased deliveries of power to California from a specified source, including under any newly executed contract;

....

B. The Default Emissions Factor For Unspecified Power Is Too Low And Would Disfavor Lower Emitting Generating Resources

The Proposed Amendments to the MRR would set the default emission rate for unspecified power at 0.428 metric tons ("MT") of carbon dioxide equivalents ("CO₂e") per MWh. *See* Proposed Cal. Code Reg., tit. 17 § 95111(b)(1). This default emissions rate will then determine the allowance compliance obligation for unspecified power under the Proposed Cap-and-Trade Regulation. Calpine is concerned that, by applying a low default emissions rate for unspecified power, the Proposed Amendments will cause reporting entities to classify their higher emitting imports as unspecified power so that they will be treated more favorably and gain an economic benefit, in comparison to lower-emitting sources of imported power and in-state generating sources. This could generate the perverse result of encouraging increased dispatch of higher-emitting sources, to the detriment of both lower-emitting imports and in-state generating sources. As a consequence, Calpine believes that the low default emissions rate proposed by the 15-Day Modifications will create market distortions that work against, rather than support, the goals of the Proposed Cap-and-Trade Regulation.

Calpine maintains that the default emissions rate is too low. Further, we do not believe that the market distortions produced by adoption of this rate will be avoided or alleviated by the Proposed Cap-and-Trade Regulation's prohibition on resource shuffling. *See* Proposed Cal. Code Reg., tit. 17, § 95852(b)(1). Calpine believes that a more appropriate rate for unspecified imports would be equivalent to the emissions from coal-fired sources currently importing power to California, which would encourage natural gas-fired sources to specify their imports of power and increase the accuracy of the California inventory. At the very least, Calpine believes it should be raised to the level suggested by the Western Power Trading Forum ("WPTF") in its comments, which suggest setting the default rate at the capacity-weighted average of the marginal gas-fired units, at approximately 0.51 MT CO₂e/MWh.

C. The Proposed Amendments To The MRR's Applicability Provisions Unintentionally Exclude Electric Generating Facilities Exempt From The Acid Rain Program From The Reporting Requirements Of The MRR, Even Though Such Facilities Will Be Subject To The Proposed Cap-And-Trade Program

By defining applicability of the MRR by reference to Table A-3 of the U.S. Environmental Protection Agency's ("EPA's") Mandatory Greenhouse Reporting regulation, 40 Code of Federal Regulations ("CFR") Part 98, the Proposed Amendments to the MRR fail to capture those electric generating facilities that are not subject to EPA's Acid Rain Program and do not

report emissions of CO₂ pursuant to 40 CFR Part 75. *See* Proposed Amendments, Cal. Code Reg., tit. 17 § 95101(a). Because the Proposed Cap-and-Trade Regulation does not limit applicability to only those facilities reporting emissions of CO₂ under the Acid Rain Program, electric generating facilities exempt from the Acid Rain Program will be subject to the Cap-and-Trade Regulation, even though they would have no reporting obligation under the MRR. We do not believe this was CARB's intention.

Calpine operates facilities in California that are exempt from the requirements of Part 75, but nevertheless have emissions above the Proposed Cap-and-Trade Regulation's applicability threshold. These facilities are not identified in Table A-3 of EPA's Mandatory Greenhouse Gas Reporting regulation. *See* Table A-3 to Subpart A—Source Category List for § 98.2(a)(1); 75 Federal Register 39,736, 39,760 (Jul. 12, 2010). By limiting applicability of the MRR to sources listed in Table A-3, the Proposed Amendments to the MRR would produce the odd result that electric generating facilities exempt from Part 75 would not be subject to mandatory reporting, even though they are subject to a compliance obligation under the Cap-and-Trade Regulation. This logical conundrum cannot be what was intended by CARB in revising the applicability provisions of the MRR in the 15-Day Modifications. Calpine recognizes that CARB intends to harmonize the reporting requirements under the MRR with those under EPA's Mandatory Reporting regulation to the greatest extent possible. However, unless CARB also intends to exempt non-Part 75 facilities from the compliance obligation under the Proposed Cap and Trade Regulation, it must revise the applicability provisions, so they do not produce such an obviously unintended and illogical result.

D. CARB Should Reaffirm Its Commitment To The Principle Of Proportionality In Enforcement Of The MRR And Should Not Seek Exorbitant Penalties For Violations Reflecting No Wrongful Behavior And Without Any Demonstrable Environmental Consequences

Under the Proposed Amendments to the MRR, each day or portion thereof in which any required report is late or contains incomplete or inaccurate information constitutes a separate violation. *See* Proposed Cal. Code Reg., tit. 17, § 95107(a). In addition, each ton of CO₂e emitted, but not reported, constitutes a separate violation. *See id.*, § 95107(b). Thus, under the Proposed Amendments, even an inadvertent data entry error could result in literally millions of individual violations of the Health and Safety Code.

While Calpine would like to believe that CARB will not wield these penalty provisions in a heavy-handed fashion, the potential civil liability for even an inadvertent error in reporting could quickly escalate into the trillions of dollars, depending upon where a mistaken decimal place should happen to fall. Calpine believes that such draconian penalties would, in many cases, be completely inconsistent with the nature of the violation and would betray the principle of proportionality that should undergird a regulatory agency's enforcement of its regulations. As a consequence, CARB will have a powerful tool in settlement negotiations to insist upon penalties grossly disproportionate to the nature of the violation, with the threat of potential civil penalties that could be sought in court orders of magnitude greater.

Adherence to the detailed provisions of the MRR will be a major undertaking for reporting entities and one that is unlikely to be free of error, particularly in the first years of the MRR's implementation. Calpine is concerned that, as drafted, the Proposed Amendments could transform a seemingly innocuous and inadvertent human error into the subject of a major enforcement action, even though no impact on global climate change could likely be demonstrated as a result of the error.

As we begin to implement new regulatory programs to regulate carbon, even well-intentioned individuals are likely to make mistakes. Calpine is concerned that, by classifying each day that a report is inaccurate or late and each ton of emissions that is under-reported as a separate violation, the Proposed Amendments may constrain CARB's enforcement discretion to seek penalties proportional to the nature of the alleged violation and its resulting harm. Accordingly, Calpine proposes the following changes to assure that the Proposed Amendments do not constrain CARB's discretion to impose an appropriate penalty under the relevant statutory provisions:

§ 95107. Enforcement.

- (a) Each day or portion thereof that any report required by this article remains unsubmitted, is submitted late, or contains information that is incomplete or inaccurate is may be deemed a separate violation and subject to penalties in accordance with the criteria set forth by Health and Safety Code section 42403(b). For purposes of this section "report" means any emissions data report, verification statement, or other record required to be submitted to the Executive Officer by this article.
- (b) Each metric ton of CO₂e emitted but not reported as required by this article is may be deemed a separate violation and subject to penalties in accordance with the criteria set forth by Health and Safety Code section 42403(b).

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Hon. Mary D. Nichols, Chairman
California Air Resources Board
August 11, 2011
Page 9 of 9

Calpine looks forward to working with the Board and staff to ensure that timely and successful implementation of the Proposed Amendments to the MRR and the Proposed Cap-and-Trade Regulation.

Please feel free to contact me at 925.557.2238 with any questions or concerns regarding these comments. Thank you for the opportunity to submit these comments.

Sincerely,

A handwritten signature in black ink, appearing to be 'B. McBride', with a long horizontal stroke extending to the right.

Barbara McBride
Director, Environmental, Health and Safety

cc: James Goldstene, Executive Officer
Edie Chang, Chief, Planning and Management Branch, Office of Climate Change
Steven S. Cliff, Ph.D., Manager, Program Evaluation Branch, Office of Climate Change
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