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October 19, 2015

Ms. Rajinder Sahota
Branch Chief, Cap-and-Trade Program
California Air Resources Board
1001 I Street
Sacramento, CA

Dear Ms. Sahota:

Subject: LADWP Comments on Cap-and-Trade Regulation 2016 Amendments

Thank you for the opportunity to provide input for the development of amendments to the Cap-and-Trade Regulation, as discussed at the public workshop held on October 2, 2015.

The Los Angeles Department of Water and Power (LADWP) is a vertically integrated publicly-owned utility of the City of Los Angeles, serving a population of over 3.8 million people within a 465 square mile service territory covering the City of Los Angeles and portions of the Owens Valley. The LADWP is the third largest electric utility in the state, one of five California Balancing Authorities, and the nation's largest municipal utility. LADWP's mission is to provide clean, reliable water and power in a safe, environmentally responsible and cost-effective manner.

LADWP looks forward to working with California Air Resources Board (ARB) staff and other stakeholders to develop amendments to the Cap-and-Trade Regulation. For starters, LADWP submits the following comments for your consideration when developing potential amendments to the Cap-and-Trade regulation. In addition, LADWP supports the comments submitted by the Southern California Public Power Authority (SCPPA).

1) Streamlining Auctions

In summary, LADWP recommends the following changes to streamline auctions:

- Reduce the amount of time between:
 - posting of the auction notice and the auction itself, and
 - the deadline to consign allowances to auction and the auction itself
- Remove the requirement to submit an intent to bid

- If bid guarantees are limited to wire transfers only, auction settlement should occur within three business days, and the deadline for receipt of the wire transfer should be one business day prior to the auction
- Bid guarantee requirements should be modified no more than once per calendar year

LADWP agrees with the potential amendment to reduce the amount of time between posting of the auction notice and the auction itself, provided that the auction consignment deadline in section 95910(d)(4) is also amended to reduce the amount of time between the deadline to consign allowances to auction and the auction. Although volatility in carbon allowance markets has been relatively low, the current requirement for entities to consign allowances 75 days prior to an auction impedes entities' ability to properly plan and execute a compliance strategy as the market price of carbon allowances fluctuates. The more time the price has to fluctuate, the less certainty entities have for planning purposes. Therefore, a shorter time period between consigning allowances and the auction would be beneficial.

LADWP has concerns regarding the potential amendment to reduce bid guarantee options and requests further information. If ARB limits bid guarantee options to wire transfers only, LADWP proposes that ARB settle all auctions, including disbursement of auction proceeds and allowances, within three business days. Furthermore, if ARB limits bid guarantee options to wire transfers only, LADWP proposes that the deadline for the wire transfer to be received by the Financial Services Administrator should be one business day prior to the auction date.

LADWP also proposes that bid guarantee requirements, including but not limited to the mailing address and contact information of the Financial Services Administrator, be modified no more than once per calendar year, which would further streamline the auction process.

2) Streamlining Information Management

In summary, LADWP recommends the following changes to streamline submittal of information:

- Electronic submittal of information via CITSS with an electronic signature
- Update CITSS Form 3 once per quarter rather than every time a change occurs
- Allowance distribution preference forms should remain valid until updated rather than having to re-submit the allowance distribution form every year
- Narrow the scope of activities to be classified as a *Cap-and-Trade Consultant and Advisor* to only activities whereby a person could reasonably ascertain knowledge of an entity's market position

LADWP supports electronic submittal of information with an electronic signature to the greatest extent possible to reduce the administrative burden. LADWP recommends that the following information be submitted electronically via the CITSS platform along with an electronic signature:

1. Changes to information on CITSS Form 3
2. Distribution of a publicly owned electrical distribution utilities' directly allocated allowances into their Limited Use Holding and/or Compliance Account
3. Report on the use of Auction Proceeds and Allowance Value, pursuant to section 95892(e)

To further reduce administrative burden, LADWP proposes updating CITSS Form 3 only once per quarter rather than every time a change occurs (e.g. personnel changes due to reassignments or retirements). In addition, a publicly owned electrical distribution utilities' allowance distribution preference form should remain valid until updated, rather than having to submit a new distribution preference form every year. The last sentence in section 95892(b)(3) *If an entity fails to submit its distribution preference by September 1, ARB will automatically place all directly allocated allowances for the following budget year in the entity's Limited Use Holding Account* should be deleted.

The current definition of a Cap-and-Trade Consultant or Advisor in section 95923 is too broad, encompassing any activity listed in section 95979(b)(2). LADWP proposes narrowing the definition to include only activities whereby an advisor could reasonably ascertain knowledge of an entity's market position. Activities including, but not limited to, general legal advice should not be included. Narrowing the scope of this definition would diminish entities' administrative burden and further streamline the management of information.

3) Disclosure of Market Information

LADWP supports the publication of an allowance price index, including the quantity and price of each transfer with the identities of each party masked, as this would aid in the price discovery process.

4) RPS Adjustment

The Renewable Portfolio Standard (RPS) Adjustment must be retained in order to treat directly and indirectly delivered renewable energy equally (as zero emission) under the Cap-and-Trade program. There is no Cap-and-Trade compliance obligation on directly delivered renewable energy because it is reported as specified with a zero emission factor. Without the RPS Adjustment, there would be a Cap-and-Trade compliance obligation on indirectly delivered renewable energy, which is reported as unspecified with the default emission factor plus the two percent default transmission loss factor.

The RPS Adjustment is an adjustment to the compliance obligation only, and has no effect on Greenhouse Gas (GHG) emissions accounting.

Back in 2011, ARB created the RPS Adjustment to offset the Cap-and-Trade compliance obligation on indirectly delivered renewable energy. According to page 108 of the Final Statement of Reasons (FSOR) for the 2011 amendments to the mandatory reporting regulation, *"The RPS adjustment is not a recognition of avoided emissions, but an adjustment to the compliance obligation to recognize the cost to comply with the RPS program. ARB included the RPS adjustment for the specific purpose of reducing the cost of RPS compliance that would be born directly or indirectly by entities that must comply with California's RPS program."* In addition, *"The RPS adjustment applies to electricity that is not directly delivered to California, and therefore is not included in statewide GHG emissions accounting."*

We understand ARB staff is concerned about potential double counting of the environmental attributes for imported renewable energy. The issue appears to be ARB's interpretation that null power (renewable energy without its environmental attributes), that is purchased from a specified generating facility and delivered directly from the generating facility into California, must be reported as a specified import with a zero emission factor even though the importer does not own the associated environmental attributes (Renewable Energy Credits or RECs). Section 95852(b)(3) of the Cap-and-Trade regulation requires that, if RECs were created for the energy, the RECs must be reported and verified in order to claim a compliance obligation based on a specified source emission factor. The importer of null power cannot satisfy this requirement because they bought the energy without the RECs. Rather than disqualifying the null power from being reported as a specified import, ARB's interpretation is the null power must be reported as a specified import with a zero emission factor, and failure to report the RECs is merely a non-conformance with the rule requirements. See excerpt copied below from the FSOR for the 2011 amendments to the mandatory reporting regulation.

"ARB notes that the cap-and-trade regulation further stipulates that if RECs were created for the electricity generated and reported pursuant to the MRR, then the RECs must be retired and verified pursuant to the MRR (section 95852(b)(3)(D) of the cap-and-trade regulation). If the electricity importer's verifier cannot confirm that the RECs are retired, the reporting entity will be in non-conformance with this provision, but the claim to the zero GHG emission factor (0 MT of CO₂e/MWh) remains valid." [FSOR for the 2011 amendments to the mandatory reporting regulation, page 108]

ARB may want to revisit this interpretation. If this interpretation is retained, in order to avoid potential double counting between directly delivered imports of null power and the RPS Adjustment, the owner of the null power will need to tell the owner of the REC that they directly delivered the null power into California and claimed the zero emission factor. While this situation is not ideal, it can be mitigated by good communication between reporting entities and thorough review by the verifiers. Alternately, the potential for double counting could be eliminated entirely by disqualifying null power without RECs from being reported as a specified import.

In any case, the RPS Adjustment should be retained. The RPS Adjustment is essential to ensure that California electric utilities (and their customers) do not end up paying extra for RPS compliant firming and/or shaped renewable energy that is not directly delivered into California. For example, wind energy from Oregon is typically not directly delivered to California because of the high variability and transmission costs. California electric utilities already pay a premium to buy renewable energy with its environmental attributes, as well as pay for firming/shaping and delivery services. Without the RPS Adjustment, California electric utilities would also have to pay the Cap-and-Trade compliance obligation on indirectly delivered renewable energy. For the 2014 thru 2020 period, 15 to 35 percent of a California Electric Utility's RPS compliance obligation could be satisfied with "Bucket 2" indirectly delivered renewable energy. Eliminating the RPS Adjustment would result in significant and unexpected additional costs to California electric utilities and their customers. Therefore, the RPS Adjustment is an important cost mitigation element of the Cap-and-Trade program and should be retained.

In addition to retaining the RPS Adjustment, LADWP recommends the following modifications:

A) Add credit for the two percent default transmission loss factor to the RPS Adjustment so that directly delivered and indirectly delivered renewable energy are treated equally and not assessed any compliance obligation under the Cap-and-Trade Program.

If the RPS Adjustment is intended to neutralize the Cap-and-Trade compliance obligation for imported "Bucket 2" renewable energy, the credit needs to account for both the unspecified electricity emission factor (0.428 MT CO₂e/MWh) and the two percent default transmission loss factor so that the difference between the reported GHG emissions for the imported electricity and the RPS Adjustment credit is equal to zero. Currently, the RPS Adjustment provides credit only for the unspecified electricity emission factor but does not provide credit for the two percent transmission loss factor. As a result, there is a two percent deficit in the RPS Adjustment credit such that the credit does not fully offset the Cap-and-Trade compliance obligation for the indirectly

delivered renewable energy. To ensure equal treatment of directly and indirectly delivered renewable energy, the RPS Adjustment should include credit for the two percent default transmission loss factor so that all imported renewable energy is treated as zero emission under the Cap-and-Trade program.

To accomplish this, LADWP recommends the following amendments to the Cap-and-Trade and the mandatory reporting regulations:

Cap and Trade Regulation section 95852(b)(4)(C)

The quantity of emissions included in the RPS adjustment is calculated pursuant to MRR as the product of the default emission factor for unspecified sources, the transmission loss correction factor for unspecified sources pursuant to MRR, and the reported electricity generated (MWh) that meets the requirements of this section, 95852(b)(4).

Mandatory Reporting Regulation section 95111(b)(5)

$CO_2e_{RPS_adjust}$ = Sum of CO_2 equivalent mass emissions adjustment is calculated using the following equation for electricity generated by each eligible renewable energy resource located outside the state of California and registered with ARB by the reporting entity pursuant to section 95111(g)(1), but not directly delivered as defined pursuant to section 95102(a). Electricity included in the RPS adjustment must meet the requirements pursuant to section 95852(b)(4) of the cap-and-trade regulation (MT of CO_2e).

$$CO_2e_{RPS_adjust} = MWh_{RPS} \times TL \times EF_{unsp} (MTCO_2e / MWh)$$

Where:

MWh_{RPS} = Sum of MWh generated by each eligible renewable energy resource located outside of the state of California, registered with ARB pursuant to section 95111(g)(1), and meeting requirements pursuant to section 95852(b)(4) of the cap-and-trade regulation.

TL = Transmission loss correction factor for unspecified sources of 1.02 as defined in section 95111(b)(1).

$EF_{unsp} =$ Default emission factor for unspecified sources as defined in section 95111(b)(1) (MT CO₂e/MWh)

B) Clarify the deadline to retire RECs for the RPS Adjustment.

Section 95852(b)(4)(B) of the Cap & Trade regulation states that RECs must be placed into the retirement subaccount within 45 days of the reporting deadline for the year in which the RPS Adjustment is claimed. Within 45 days could be interpreted as April 15 to July 15. It is our understanding based on previous discussions with ARB staff that it was ARB's intent to allow for the RECs to be retired up to 45 days after the reporting due date. On page 109 of the FSOR for the 2011 amendments to the mandatory reporting regulation, ARB states "*Pursuant to cap-and-trade regulation section 95852(b)(4)(B), RECs associated with the RPS adjustment must be retired in order to claim the adjustment. Electricity importers must make final corrections within 45 days following the June 1 reporting deadline...*"

LADWP recommends clarifying the rule language as follows:

95852(b)(4)(B) The RECs associated with the electricity claimed for the RPS adjustment must be placed in the retirement subaccount of the entity subject to the California RPS, and party to the contract in 95852(b)(4)(A), in the accounting system established by the CEC pursuant to PUC 399.25, and designated as retired for the purpose of compliance with the California RPS program within no later than 45 days following of the reporting deadline specified in section 95111(g) of MRR for the year for which the RPS adjustment is claimed.

5) Add credit similar to RPS Adjustment for voluntary green power programs.

Some California electric utilities have voluntary renewable energy programs for their customers, where the customers pay extra for the utility to procure renewable electricity to offset the customer's electricity consumption. This additional renewable electricity procurement is above and beyond renewable electricity procured to comply with the RPS program. For example, the electric utility would procure renewable electricity equal to 20 percent of their regular customer's consumption and 100 percent of their green power program customer's consumption.

The RPS Adjustment applies only to renewable energy that is used for RPS compliance. Indirectly delivered renewable energy imported on behalf of voluntary green power program customers does not qualify for the RPS Adjustment, because the RECs are not designated as retired in the California Energy Commission's (CEC) accounting system for the purpose of compliance with the California RPS program. It also does not qualify for the Voluntary Renewable Energy provision in the Cap & Trade

rule, which currently applies only to directly delivered renewable energy. To be fair, indirectly delivered renewable energy imported for voluntary green power programs should not be subject to the Cap-and-Trade compliance obligation.

Therefore, LADWP requests that a credit similar to the RPS adjustment, applicable to indirectly delivered renewable energy imported for voluntary green power programs, be added to the Cap-and-Trade regulation to provide equal treatment for renewable energy imported to satisfy the needs of customers who voluntarily want to go above and beyond the renewable energy level required by the RPS.

6) Qualified Export Adjustment

The intent of this rule provision was to provide emissions credit for electricity exported from California, in lieu of a "border adjustment". Deducting emissions for exported electricity is necessary for several reasons: 1) to account for electricity consumed in California in accordance with AB 32 sections 38505 and 38530 which direct ARB to account for greenhouse gas emissions from all electricity **consumed in the state**, and 2) pending legislation would apply GHG emission data reported to ARB to California retail sales in the Power Content Label report to the CEC.

However, this rule provision as written does not provide adequate credit for exported electricity because it requires use of the lowest emission factor from any import or export to calculate the credit. Since LADWP imports zero emission power during every hour from clean generating resources such as Hoover Dam, wind and solar, LADWP's Qualified Export Adjustment is always zero under the current requirements, therefore LADWP cannot claim any credit for the electricity we export.

To rectify this, LADWP recommends either of the following solutions: 1) Simply deduct emissions for exported electricity from the "Exports" tabs of the Electric Power Entity report from covered emissions, or 2) Use the default emission factor (for unspecified imports and exports) instead of the lowest emission factor from any import or export in the hourly Qualified Exports calculation.

Therefore, LADWP recommends either deleting this provision in its entirety from the rule, or amending it as follows:

95852(b)(5) QE adjustment. An adjustment to the compliance obligation pursuant to the calculation in 95852(b)(1) may be made for exported and imported electricity during the same hour by the same PSE. Emissions included in the QE adjustment for qualified exports claimed by a first deliverer must meet the following requirements:

(A) During any hour in which an electricity importer claims qualified exports and corresponding imports, the maximum amount of QE adjustment for the hour shall not exceed the product of:

1. The lower of either the quantity of exports or imports (MWh) for the hour; multiplied by

2. The ~~lowest emission factor of any portion of the qualified exports or corresponding imports for the hour.~~ Default emission factor for unspecified sources as defined in section 95111(b)(1) (MT CO₂e/MWh)

7) Emergency Exemption for Imported Electricity should apply to all Balancing Authorities

The emergency assistance provision in the definition of Imported Electricity should apply to all Balancing Authorities equally, and not be limited to just the Independent System Operator (CAISO). A number of other Balancing Authorities operate within California (including the Los Angeles Department of Water and Power) that are also subject to the emergency preparedness and operation reliability standards of the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC). This exclusion from reporting and Cap-and-Trade compliance obligation for electricity imported into California for emergency assistance should apply to all Balancing Authorities equally, since all Balancing Authorities are responsible for maintaining reliability of the grid and could potentially need to import electricity on an emergency basis to maintain grid reliability.

Therefore, LADWP recommends revising the definition of Imported Electricity as follows. This change also provides clarity since "Balancing Authority" is a defined term whereas "Independent System Operator" is undefined.

95102(a)(188) "Imported Electricity" means electricity generated outside the state of California and delivered to serve load located inside the state of California. Imported electricity includes electricity delivered across balancing authority areas from a first point of receipt located outside the state of California, to the first point of delivery located inside the state of California, having a final point of delivery in California. Imported electricity includes electricity imported into California over a multi-jurisdictional retail provider's transmission and distribution system, or electricity imported into the state of California from a facility or unit physically located outside the state of California with the first point of interconnection into a California balancing authority's transmission and distribution system. Imported

electricity includes electricity that is a result of cogeneration located outside the state of California. Imported electricity does not include electricity wheeled through California, defined pursuant to MRR section 95102(a). Imported electricity does not include electricity imported into the CAISO balancing authority area to serve retail customers that are located within the CAISO balancing authority area, but outside the state of California. Imported Electricity does not include electricity imported into California by an Independent System Operator a Balancing Authority to obtain or provide emergency assistance under applicable emergency preparedness and operations reliability standards of the North American Electric Reliability Corporation or Western Electricity Coordinating Council. Imported electricity shall include Energy Imbalance Market (EIM) dispatches designated by the CAISO's optimization model and reported by the CAISO to EIM Participating Resource Scheduling Coordinators as electricity imported to serve retail customers load that is located within the State of California.

8) Asset Controlling Supplier (ACS) power

In the 2011 thru 2013 emission data reports, all imported electricity sourced from an Asset Controlling Supplier's (ACS) system was reported as specified with a low-GHG emission factor based solely on the GenSource and first PSE on the E-tag. It did not matter whether the power purchase agreement specified the source of the electricity.

In the 2013 round of amendments to the "Regulation for the Mandatory Reporting of Greenhouse Gas Emissions"(MRR), in response to input from the Asset Controlling Suppliers (Bonneville Power Administration (BPA) and Powerex for BC Hydro), ARB amended MRR section 95111(a)(5)(B) *Imported Electricity Supplied by Asset-Controlling Suppliers* by deleting "Report delivered electricity as specified and not as unspecified" and replacing it with "Report asset-controlling supplier power that was not acquired as specified power, as unspecified power." The Asset Controlling Suppliers wanted this change to enable them to charge a premium to put a "specified" label on their power.

The new specified source contract requirement took effect starting January 1, 2014. Now, only ACS power purchased with a "specified" label or purchased directly from BPA can be reported as a specified import with the low-GHG emission factor (0.0192 MT CO₂e/MWh for BPA system or 0.0216 MT CO₂e/MWh for BC Hydro system). ACS power purchased without a "specified" label must be reported as unspecified with the default GHG emission factor (0.428 MT CO₂e/MWh). Reporting ACS power as

unspecified results in a >2000 percent increase in the emission factor even though actual GHG emissions generated by the ACS' system are significantly lower.

This rule change has been detrimental to California electric utilities and their customers. ARB's justification was that they use a contract based framework to differentiate specified and unspecified imports. ACS power used to be the exception, but now is subject to the specified source contract requirement. The only exception is that power purchased directly from BPA can be claimed as specified without paying a premium for a "specified" label since BPA sells power from only one source. ACS power purchased on an exchange can no longer be reported as specified with the low-GHG emission factor.

The result is inconsistent treatment between directly delivered imports of null renewable energy and ACS power. For example, an entity subject to the California RPS has a contract to buy wind power from a facility in Oregon. However, it is expensive to transport the wind energy all the way to California, so the California entity may keep the RECs and sell off null power (without the RECs) to a marketer in the PNW. If the marketer then imports the null power into CAISO, the marketer has to report directly delivered null power as a specified import with a zero emission factor even though the marketer bought the energy without the environmental attributes. Section 95952(b)(3) of the Cap & Trade regulation (criteria to claim a specified source emission factor) requires that if RECs were created for the electricity, the RECs must be reported and verified. The marketer cannot satisfy the REC reporting requirement because they do not own the RECs. However, ARB considers this to be merely a non-conformance rather than a failure to meet the criteria for claiming a specified source emission factor, so the claim to the zero emission factor remains valid.

On the other hand, directly delivered ACS power "that was not acquired as specified power" must be reported as unspecified with the default emission factor, even though by definition "Asset controlling suppliers are considered specified sources."

In both cases, the importer did not pay a premium to buy the environmental attributes associated with the power from the seller. However, the importer of the null energy gets the benefit of the zero emission factor for free but the importer of the ACS power does not. On page 108 of the FSOR for the 2011 amendments to the mandatory reporting regulation, ARB states "*ARB believes that rigorous GHG emissions reporting must be technology neutral, in that the focus is direct, source-based emissions associated with electricity that is directly delivered.... for the emissions profile of electricity generated and procured, RECs play no role in GHG accounting.*" If null renewable energy without the RECs is counted as zero emissions, why should default GHG emissions be assigned to ACS power if the importer does not have a piece of paper stating they

bought it as specified (analogous to buying the RECs)? If "Asset controlling suppliers are considered specified sources", why is ARB not recognizing the emissions profile of imported ACS power?

If ARB believes the GHG emission attributes stay with the power rather than going with the paperwork (the REC), then ACS power should be treated as low-GHG regardless of whether the purchaser paid a premium to the seller to put a "specified" paperwork label on the ACS power. If ARB recognizes the emissions profile of directly delivered null renewable energy without RECs as zero emission, then to be consistent, ARB should recognize the low-GHG emissions profile of directly delivered ACS power without a "specified" label.

If data reported under the mandatory reporting regulation is being used for the statewide GHG emissions inventory, how will directly delivered ACS power be counted in the statewide GHG emissions inventory now that the specified source contract requirement for ACS power is in effect? If ACS power was reported as unspecified due to lack of a specified source contract, will that carry over into the statewide GHG emissions inventory? If so, reporting ACS power as unspecified will hurt the state's progress towards achieving its AB 32 GHG emission reduction goal (1990 level by 2020). Reporting ACS power as unspecified creates a programmatic inconsistency. AB 32 states that the mandatory reporting regulations shall "Ensure rigorous and consistent accounting of emissions..." Reporting imported electricity supplied by BPA as unspecified is inconsistent with previously submitted GHG emissions reports and with the statewide GHG emissions inventory. According to the technical documentation for the statewide GHG emissions inventory, imported electricity supplied by Bonneville Power Administration (BPA) was counted as an unspecified import from the Pacific Northwest with an emission factor of 0.214 MT CO₂e per MWh for the 1990 inventory, and a specified import with a zero or low-GHG Asset Controlling Supplier emission factor for years 2000 thru 2011. Under the mandatory reporting regulation, imported electricity supplied by BPA has been reported as a specified import with the BPA specific emission factor since 2011. Enclosed for reference is a summary of how imported electricity supplied by BPA has been treated in the statewide GHG emissions inventory and under the mandatory reporting regulation.

As a result of the 2013 rule amendment to the reporting criteria for ACS power, LADWP had to report 500,595 MWh of imported ACS power sourced from the BPA and BC Hydro systems in 2014 as unspecified with the default GHG emission factor. Under the previous reporting criteria, all of this imported ACS power would have been reported as specified with the low-GHG emission factor. In effect, the new contract requirement changed 500,595 MWh of previously specified ACS power into unspecified power with an associated increase in reported GHG emissions of 204,270 metric tons. This artificial

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increase in reported GHG emissions is due to application of the unspecified electricity emission factor rather than the specified ACS emission factor, resulting in Cap-and-Trade cost impacts to LADWP's customers.

LADWP recommends that CARB evaluate these programmatic inconsistencies and the associated impacts on the statewide GHG emissions inventory and cost to California businesses and consumers, and make amendments where appropriate to eliminate the reporting of inaccurate GHG emission data.

Thank you for your consideration of these comments. If you have any questions, please contact Ms. Jodean Giese at (213) 367-0409.

Sincerely,



Mark J. Sedlacek
Director of Environmental Affairs

JG:dms

Enclosure

c: Jason Gray (CARB)
Mary Jane Coombs (CARB)
Chuck Seidler (CARB)
Brieanne Aguila (CARB)
Renee Lawver (CARB)
Ms. Jodean Giese

Treatment of Imported Electricity supplied by Bonneville Power Administration in California Statewide Greenhouse Gas Emissions Inventory

Source	1990 Baseline (= 2020 Limit)	2000 thru 2010	2011
Bonneville Power Administration (BPA)	Not a specified source (included in Unspecified Imports from Pacific Northwest). CO2 emission factor = 214 g CO2 per kWh of imported electricity	Specified Import (primarily hydropower) CO2 emission factor = 0 g per kWh of imported electricity	Specified Import (primarily hydropower) CO2 emission factor = 85.4 g per kWh of imported electricity (Asset Controlling Supplier emission factor for BPA = 0.0856 MT CO2e per MWh)
Unspecified Imports (Pacific Northwest)	CO2 emission factor = 214 g CO2 per kWh of imported electricity	CO2 emission factor ranges from 196 to 427 g CO2 per kWh of imported electricity	CO2 emission factor = 427 g CO2 per kWh of imported electricity
Unspecified Imports (Pacific Southwest)	CO2 emission factor = 761 g CO2 per kWh of imported electricity	CO2 emission factor ranges from 841 to 427 g CO2 per kWh of imported electricity	CO2 emission factor = 427 g CO2 per kWh of imported electricity

Source: Documentation of California's Greenhouse Gas Inventory (last updated on 08/01/2013)

Treatment of Imported Electricity supplied by Bonneville Power Administration under ARB Mandatory Reporting Program

Source	2008 - 2010	2011 - 2012	2013	2014
Bonneville Power Administration (BPA)	Report 100% of electricity supplied by BPA as a Specified Import (MWh only)	Report 100% of electricity supplied by BPA as a Specified Import with the Asset Controlling Supplier emission factor for BPA (0.0856 MT CO2e per MWh)	Report 100% of electricity supplied by BPA as a Specified Import with the Asset Controlling Supplier emission factor for BPA (0.0249 MT CO2e per MWh)	<ul style="list-style-type: none"> Report portion of imported electricity supplied by BPA with specified source contract documentation as a Specified Import with the Asset Controlling Supplier emission factor for BPA = (0.0249 MT CO2e per MWh). Report portion of imported electricity supplied by BPA without specified source contract documentation as an Unspecified Import with the default emission factor for unspecified power (0.428 MT CO2e per MWh)
Unspecified Imports (Pacific Northwest)	Report by counterparty name (MWh only)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)
Unspecified Imports (Pacific Southwest)	Report by counterparty name (MWh only)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)	Report by first point of receipt with default emission factor for unspecified power (0.428 MT CO2e per MWh)