FINAL REGULATION ORDER

Amend Division 3, Chapter 1, Subchapter 10, Article 3, Subarticle 1 sections 95201, 95202, 95203, and 95204, title 17, California Code of Regulations to read as follows:

Article 3: Fees

Subarticle 1: AB 32 Cost of Implementation Fee Regulation

Note: The pre-existing regulation text is set forth below in normal type. The proposed amendments are shown in <u>underline</u> to indicate additions and strikeout to indicate deletions. The symbol "***" indicates sections of regulation not printed are not changed.

§ 95201. Applicability.

- (a) This subarticle applies to the following entities. The terms used below are defined in section 95202.
 - (1) Natural Gas Utilities, Users, and Pipeline Owners and Operators that deliver or use natural gas in California.

(A) All public utility gas corporations and publicly owned natural gas utilities operating in California and that are subject to the verification requirements of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (title 17, California Code of Regulations, sections 95100-95157) (Mandatory Reporting Regulation). Fees shall be paid for each therm of natural gas delivered to any end user in California, excluding natural gas delivered to electricity generating facilities that are subject to section 95201(a)(4).

(B) All owners and operators that are end users of natural gas received directly from interstate pipelines <u>and that are subject to the verification requirements of the Regulation for the Mandatory</u> <u>Reporting of Greenhouse Gas Emissions</u>, except for electricity generating facilities <u>that are subject to section 95201(a)(4)</u>. and-facilities that combust or consume less than 100,000 therms of natural gas received directly from an interstate pipeline in a reporting year. Fees shall be paid for each therm of natural gas directly delivered by interstate pipelines.

(C) All owners or operators of interstate pipelines that are notincluded in subsection 95201(a)(1)(A), and that deliver natural gasdirectly to end users in California. These entities are included for the purposes of reporting only. Each owner or operator shall report those end users in California to which they deliver 100,000 therms of naturalgas or more in a reporting year.

 $(\underline{D} \underline{C})$ All owners or operators of intrastate pipelines that are not included in subsection 95201(a)(1)(A) and that are subject to the

<u>verification requirements of the Mandatory Reporting Regulation</u>, that deliver natural gas directly to end users. Fees shall be paid for each therm of natural gas delivered directly to end users, except for natural gas delivered to electricity generating facilities <u>that are subject to</u> <u>section 95201(a)(4)</u>.

 $(E \underline{D})$ All California owners or operators that consume natural gas produced <u>from</u> on-site <u>gas wells</u> and that are subject to the <u>verification</u> <u>requirements of the</u> Mandatory Reporting Regulation. Fees shall be paid <u>on the emissions resulting from the combustion of these fuels</u>, <u>unless these fuels are consumed by an electricity generating facility</u> <u>subject to section 95201(a)(4)</u>. for each therm of natural gasconsumed of the natural gas produced on-site, unless the natural gasis consumed by an electricity generating facility.

 $(\not \in \underline{E})$ All California owners or operators that consume associated gas that is produced <u>from</u> on-site <u>oil wells</u> and that are subject to the <u>verification requirements of the</u> Mandatory Reporting Regulation. Fees shall be paid on the emissions resulting from the combustion of these fuels, unless these fuels are consumed by an electricity generating facility <u>subject to section 95201(a)(4)</u>.

(2) Producers and Importers of California Gasoline and California Diesel Fuels.

(A) All producers and importers of California gasoline or California diesel for use in California <u>subject to the verification requirements</u> <u>of the Mandatory Reporting Regulation</u>. Fees shall be paid for each gallon of gasoline or diesel fuel distributed.

 (B) All producers and importers of CARBOB <u>subject to the</u> <u>verification requirements of the Mandatory Reporting Regulation</u>.
Fees shall be paid for each gallon of CARBOB plus the designated amount of oxygenate.

(3) Cement Manufacturers.

All owners or operators of cement manufacturing facilities that emit greenhouse gases through the clinker manufacturing process. Fees shall be paid on the amount of <u>process-related</u> CO_2 emissions from <u>clinker production</u>.

(4) First Deliverers of Electricity.

(A) For electricity delivered in California prior to January 1, 2011, any owner or operator of an electricity generating facility in California that delivers electricity to the California transmission and distribution system, and any electricity importer that is the purchasing-sellingentity that delivers electricity at its first point of delivery in California. Fees shall be paid for each megawatt-hour of net power generated by combustion of natural gas, coal or other fossil fuels (except Californiadiesel) at an electricity generating facility in California, and reportedpursuant to section 95111(a) of the Mandatory Reporting Regulation.-Fees shall also be paid for each megawatt-hour of imported electricity reported pursuant to section 95111(b) of the Mandatory Reporting-Regulation if the electricity is from either unspecified sources orspecified sources that combust natural gas, coal, petroleum coke, catalyst coke, refinery gas or other fossil fuels (except Californiadiesel).

1. No fee shall be paid for any megawatt-hour generated at any electricity generating facility that has a nameplate generating-capacity of less than one megawatt, or that emits less than 2,500 metric tons of CO_2 from electricity generating activities during the reporting year.

2. No fee shall be paid for any megawatt-hour of electricity generated at a cogeneration facility.

(B) For electricity delivered in California on or after January 1, 2011. and reported pursuant to section 95103 of the Mandatory Reporting Regulation, any owner or operator of a grid-dedicated, stand-alone electricity generating facility in California that delivers electricity to the California transmission and distribution system, and any electricity importer that delivers electricity to a first point of delivery located in California. Fees shall be paid for each megawatt-hour of net power generated by combustion of natural gas, coal or other fossil fuels (except California diesel) at a grid-dedicated, stand-alone electricity generating facility in California, and reported pursuant to section 95112 of the Mandatory Reporting Regulation. Fees shall also be paid for each megawatt-hour of imported electricity reported pursuant to section 95111 of the Mandatory Reporting Regulation if the electricity is from either unspecified sources or specified sources that combust natural gas, coal, or other fossil fuels (except Californiadiesel). For multi-jurisdictional retail providers, fees shall be paid only for each megawatt-hour of wholesale sales delivered to a first point of delivery in California.

1.(A) No fee shall be paid for any megawatt-hour generated at any electricity generating facility in California that emits less than 10,000 metric tons of CO_{2e} from electricity generating activities during the report year.

(5) Facilities that Combust or Consume Coal, <u>Coal Coke</u>, Petroleum Coke (Fee Regulation only), Catalyst Coke (Fee Regulation only) or Refinery Fuel Gas.

Any owner or operator of a facility in California, except for electricity generating facilities <u>subject to section 95201(a)(4)</u>, that is subject to verification requirements in Section 95103 of the Mandatory Reporting Regulation, and combusts as fuel or consumes as feedstock any of

the following substances:

- (A) Coal;
- (B) Petroleum coke (Fee Regulation only);
- (C) Coal Coke.

For coal. coal coke, and petroleum coke (Fee Regulation only), fees shall be paid on the annual quantity of emissions as calculated pursuant to 95203(k).

(CD) Catalyst coke (Fee Regulation only); or

 $(D \underline{E})$ Refinery fuel gas.

For catalyst coke (Fee Regulation only) or refinery fuel gas, fees shall be paid on the reported emissions.

- (b) This subarticle does not apply to any of the following fuels, or to emissions resulting from combustion of any of the following fuels, unless said fuels are used at electricity generating facilities:
 - (1) aviation gasoline;
 - (2) kerosene type jet fuel;
 - (3) kerosene;
 - (4) liquefied petroleum gas;
 - (5) residual fuel oil;
 - (6) propane; or
 - (7) any fuel exported for use outside of California.
- (c) This subarticle does not apply to any of the following fuels, or to emissions resulting from combustion of any of the following fuels.
 - (1) biodiesel <u>(B≥99%);</u>
 - (2) renewable diesel (R≥99%);
 - (3) biomass;
 - (4) biogas; or
 - (5) <u>biogenic emissions from</u> municipal solid waste.
- (d) The fees associated with this subarticle shall be based upon the reported data from the most recent calendar year for which the mandatory reporting data verification process is completed, except for fiscal year 2010/11. 2008 calendar year data shall be used for fiscal year 2010/11. Regulated entities must comply with this subarticle as amended in 2014, beginning with fees calculated in 2015.

NOTE: Authority cited: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505 and 39600, Health and Safety Code.

§ 95202. Definitions.

- (a) For the purposes of this subarticle, the following definitions shall apply:
 - (1) "AB 32" ***
 - (2) "Acid gas reagent" ***
 - (3) "Acid gas scrubbers" ***
 - (4) "Annual" ***
 - (5) "ARB" or "Board" ***
 - (6) "Asset-controlling supplier" ***
 - (7) "Associated gas (Fee Regulation only)" means a natural gas fuel produced in association with crude oil from any oil well and subsequently burned in the field as a fuel.
 - (8) "Aviation gasoline" ***
 - (9) "Balancing authority" ***
 - (10) "Balancing authority area" ***
 - (11) "Billing address" ***
 - (12) "Bigeneration unit" ***
 - (13) "Biodiesel" ***
 - (14) "Biogas" ***
 - (15) "Biogenic emissions" means GHG emissions generated as the result of biomass combustion from combustion units.
 - (15 16) "Biomass" ***
 - (16 <u>17</u>) "Busbar" ***
 - (17 18) "Calendar year" ***
 - (18 19) "California balancing authority" ***
 - (19 20) "California gasoline" ***
 - (20 21) "California reformulated gasoline blendstock for oxygenate blending," or "CARBOB," ***

For CARBOB,

- (A) "Produce" ***
- (B) "Producer" ***

- (C) "Supply" ***
- (D) "Importer" ***
- (E) "Import" ***
- (21 22) "California diesel fuel" has the same meaning as "Vehicular Diesel Fuel," as defined in title13, California Code of Regulations, section 2282(b).

For California diesel fuel,

- (A) "Produce" for California diesel fuel has the same meaning as "Vehicular Diesel Fuel," as defined in title 13, California Code of Regulations, section 2282(b).
- (B) "Producer" for California diesel fuel has the same meaning as <u>"Vehicular Diesel Fuel," as defined in title 13, California</u> Code of Regulations, section 2282(b).
- (C) "Supply" ***
- (D) "Importer" ***
- (E) "Import" ***
- (22 23) "Carbon dioxide" or "CO2" ***
- (23 24) "Carbon dioxide equivalent" or "CO2 equivalent" or "CO2e" ***
- (24 25) "Catalyst" ***
- (25 26) "Catalyst coke (Fee Regulation only)" means carbon that is deposited on a catalyst, thus deactivating the catalyst.
- (26 27) "Cement" ***
- (27 28) "Cement manufacturer" ***
- (28 29) "Cement plant" ***
- (29 30) "Clinker" ***
- (30 31) "Coal" ***
- (32) <u>"Coal Coke" means a solid residue high in carbon content produced</u> by the destructive distillation of coal at high temperatures in either a by-product coke oven battery or a non-recovery coke oven battery.
- (31 33) "Cogeneration" ***
- (32 34) "Cogeneration facility" ***

- (33 35) "Cogeneration system" ***
- (34 36) "Cogeneration unit" ***
- (35 37) "Combust" ***
- (36 38) "Combustion emissions" ***
- (37 39) "Consumption" ***
- (38 40) "Consumed on-site" ***
- (39 41) "Continuous physical transmission path" ***
- (40) "Covered emissions" mean all emissions included in a compliance obligation under sections 95852 through 95852.2 of the Cap-and-Trade Regulation, regardless of whether the Cap-and-Trade Regulation imposes a compliance obligation for the data year.
- (41 42) "Cracking" ***
- (42 43) "Debt" ***
- (43 44) "Delivered electricity" ***
- (44 45) "Direct delivery of electricity" or "directly delivered" ***
- (45 46) "EIA" ***
- (46 47) "Electricity delivered in California" ***
- (47 48) "Electricity fee rate" ***
- (48 49) "Electricity generating facility" ***
- (49 50) "Electricity generating unit" or "EGU" ***
- (50 <u>51</u>) "Electricity importers" deliver imported electricity. For electricity that is scheduled with a NERC e-Tag to a final point of delivery inside the State of California, the electricity importer is identified on the NERC e-Tag as the purchasing-selling entity (PSE) on the last segment of the tag's physical path with the point of receipt located outside the State of California and the point of delivery located inside the State of California. For facilities physically located outside the State of California with first point of interconnection to a California balancing authority's transmission and distribution system, when the electricity is not scheduled on a NERC e-Tag, the importer is the facility operator or scheduling coordinator. Federal and State agencies are subject to the regulatory authority of ARB under this article and include Western Area Power Administration (WAPA), Bonneville Power Administration (BPA), and California Department of Water Resources (DWR). <u>Electricity Importers include Energy Imbalance Market (EIM)</u>

Participating Resource Scheduling Coordinators serving the EIM market whose transactions result in imports into California.

- (51 52) "Eligible renewable energy resource" ***
- (52 53) "Emissions" ***
- (53 54) "Emissions data report" or "greenhouse gas emissions data report" or "report" ***
- (54 55) "Emission factor" ***
- (55 56) "End user" ***
- (57) "Energy Imbalance Market" or "EIM" means the operation of the CAISO's real-time market to manage transmission congestion and optimize procurement of energy to balance supply and demand for the combined CAISO and EIM footprint.
- (56 58) "Entity" ***
- (57 59) "Exclusive marketer" ***
- (58 60) "Executive Officer" ***
- (59 61) "Exported electricity" ***
- (60 62) "Facility" ***
- (61 63) "Fee determination notice" ***
- (62 64) "Feedstock" ***
- (63 65) "Final point of delivery" ***
- (64 66) "First deliverer of electricity" or "first deliverer" ***
- (65 67) "First point of delivery in California" ***
- (66 68) "First point of receipt" ***
- (67 69) "Fiscal year" ***
- (68 70) "Fossil fuel" ***
- (69 71) "Fuel" ***
- (70 72) "Fuel fee rate" ***
- (71 73) "Fuel supplier" ***
- (72 <u>74</u>) "Gallon" ***

(75) "Gas well" means a well completed for production of natural gas from one or more gas zones or reservoirs. Such wells contain no

completions for the production of crude oil.

- (73 76) "Generated electricity" ***
- (74 77) "Generating unit" ***
- (75 78) "Global warming potential" or "GWP" ***
- (76 79) "Government agency" ***
- (77 80) "Greenhouse gas source" ***
- (78 81) "Grid" or "electric power grid" ***
- (79 82) "Grid-dedicated facility" ***
- (80 83) "Gross generation" or "gross power generated" ***
- (81 84) "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 to 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 this subsection. Imported electricity does not include electricity imported into the California Independent System Operator (CAISO) balancing authority area to serve retail customers that are located within CAISO balancing authority area, but outside the State of California. Imported Electricity does not include electricity imported into California by an Independent System Operator 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 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 are located within the State of California.

(82 85) "Interstate pipeline" ***

(83 86) "Intrastate pipeline" ***

- (84 87) "Kerosene" ***
- (85 88) "Kerosene type jet fuel" ***
- (86) "Linked jurisdiction" means a jurisdiction which has entered into a linkage agreement pursuant to subarticle 12 of the Cap-and-Trade Regulation¹.
- (87 89) "Liquefied petroleum gas" or "LP-Gas" or "LPG" ***
- (88 90) "Local distribution company" or "LDC" ***
- (89 91) "Mandatory Reporting Regulation" ***
- (90 92) "Marketer" ***
- (91 93) "Megawatt-hour" or "MWh" ***
- (92 94) "Meter" ***
- (93 95) "Metric ton" or "MT" ***
- (94 96) "MMBtu" ***
- (95 97) "Motor vehicle" ***
- (96 98) "Multi-jurisdictional retail provider" ***
- (97 99) "Municipal Solid Waste" ***
- (98 100) "Nameplate generating capacity" ***
- (99 101) "Natural gas" ***
- (100 102) "Natural gas importer" ***
- (101 103) "NERC e-Tag" ***
- (102 104) "Net generation" or "Net power generated" ***
- (105) "Oil well" means a well completed for the production of crude oil from at least one oil zone or reservoir.
- (103 106) "Operational control" ***
- (104 107) "Operator" ***
- (105 108) "Owner" ***
- (106 109) "Oxygenate" ***
- (107 110) "Payment period" ***

⁴ California Cap on Greenhouse Gas Emissions and Market based Compliance Mechanisms Regualtion, title 17,-California Code of Regulations, sections 95800 to 96022.

- (108 111) "Petroleum coke (Fee Regulation only)" means a <u>black</u> solid residue, high in carbon content and low in hydrogen that is the finalproduct of thermal decomposition in the condensation process in cracking obtained mainly by cracking and carbonizing of petroleum derived feedstocks, vacuum bottoms, tar and pitches in processes such as delayed coking or fluid coking. It consists mainly of carbon (90 to 95 percent), has low ash content, and may be used as a feedstock in coke ovens. This product is also known as marketable coke.
- (109 112) "Petroleum refinery" or "refinery" ***
- (110 113) "Point of delivery" or "POD" ***
- (111 114) "Point of receipt" or "POR" ***
- (112 115) "Power" ***
- (113 116) "Process" ***
- (114 117) "Process emissions" ***
- (115 118) "Produced on-site" ***
- (116 119) "Propane" ***
- (117 120) "Publicly-owned natural gas utility" ***
- (118 121) "Public utility gas corporation" ***
- (119 122) "Purchasing-selling entity" or "PSE" ***
- (120 123) "Qualified exports" ***
- (121) "Radiative forcing" means the change in the net vertical irradiance at the atmospheric boundary between the troposphere and the stratosphere due to an internal change or a change in the external forcing of the climate system such as a change in the concentration of carbon dioxide or the output of the sun.
- (122 124) "Refinery fuel gas" ***
- (123 125) "Renewable diesel" ***
- (124 126) "Renewable energy" ***
- (127) "Renewable Energy Credit" or "REC" has the same meaning defined in the California Energy Commission's "Renewable Portfolio Standard Eligibility," 7th edition, Commission Guidebook, April, 2013, CEC-300-2013-005-ED7-CMF, pages 123-125, which are incorporated by reference herein.
- (125 128) "Reporting entity" ***

- (126 129) "Report Year" or "Reporting Year" ***
- (127 130) "Residual fuel oil" ***
- (128 131) "Retail provider" ***
- (129 132) "Self-generation facility" ***
- (130 133) "Short ton" or "Ton" ***
- (131 134) "Sink" or "sink to load" or "load sink" ***
- (132 135) "Source" ***
- (133 136) "Specified source of electricity" or "specified source" ***
- (134 137) "Stand-alone electricity generating facility" ***
- (135 138) "Stationary" ***
- (136) "Steam methane reforming process" means a method in which high temperature steam is used to produce hydrogen from a methane source.
- (137 139) "Substitute power" or "substitute electricity" ***
- (138 140) "Therm" ***
- (139 141) "Thermal energy" ***
- (140 142) "Unspecified source of electricity" or "unspecified source" ***
- (141 143) "Useful thermal output" ***
- (142 144) "Wholesale sales" ***
- NOTE: Authority cited: Section 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38530, 39600 and 39601, Health and Safety Code.

§ 95203. Calculation of Fees.

- (a) Total Required Revenue (TRR).
 - (1) The Required Revenue (RR) shall be the total amount of funds necessary to recover the costs of implementation of AB 32 program expenditures for each fiscal year, based on the number of personnel positions, including salaries and benefits and all other costs, as approved in the California Budget Act for that fiscal year.
 - (2) For fiscal years 2010/2011, 2011/2012, 2012/2013, and 2013/2014, the RR shall also include the payments required to be made by ARBon the Debt incurred. The Debt shall be repaid at a rate of \$27 milliondollars for each of fiscal years 2010/2011, 2011/2012, and-2012/2013. The remaining Debt shall be repaid in fiscal year-

2013/2014.

- (3 2) The RR shall also include any amounts required to be expended by ARB in defense of this subarticle in court.
- (4 3) If there is any excess or shortfall in the actual revenue collected for any fiscal year, such excess or shortfall shall be carried over to the next year's calculation of the Total Revenue Requirement. If ARB does not expend or encumber the full amount authorized by the California Legislature for any fiscal year, the amount not expended or encumbered in that fiscal year shall be carried over and deducted from the next year's calculation of the Total Revenue Required.
- (5 4) The annual Total Revenue Requirement is equal to the annual RR adjusted for the previous fiscal year's excess or shortfall amount, as provided in subsection (a)(4).
- (b) Common Carbon Cost.

The Executive Officer shall calculate a Common Carbon Cost (CCC), which represents the annual cost per $MTCO_{2\underline{e}}$ emitted. The CCC shall be calculated in accordance with the following formula:

$$CCC =$$

$$\frac{\text{TRR}}{(Q_c \times EF_c) + Q_{cc} + Q_{rga} + (Q_{ng} \times Ef_{ng}) + (Q_{ag}) + (Q_{ngw}) + (Q_g \times Ef_g) + (Q_d \times Ef_d) + (Q_e \times Ef_e) + Q_{pe}}$$

Where

- TRR = Total Required Revenue, as specified in subsection 95203(a).
- $(Q_c \times Ef_c) =$ Statewide quantity of emissions <u>(MTCO_2e)</u> from coal, <u>coal coke.</u> or petroleum coke (Fee Regulation only), except that used in an electricity generating facility <u>subject to 95201(a)(4)</u>, calculated as the sum of:

 $(Q_b \times Ef_b) = Quantity of bituminous coal (Q_b) \times the emission factor <u>of MTCO₂e</u> for bituminous coal (Ef_b);$

 $(Q_1 \times Ef_1) = Quantity of lignite coal (Q_1) \times the emission factor of MTCO_2e (Ef_1) for lignite coal;$

 $(Q_a \times Ef_a) = Quantity of anthracite coal (Q_a) \times the emission <u>of MTCO₂e</u> factor (Ef_a) for anthracite coal;$

 $(Q_{sb} \times Ef_{sb}) = Quantity of subbituminous coal (Q_{sb})x$ the emission factor <u>of MTCO₂e</u> (Ef_{sb}) for subbituminous coal;

 $(Q_{coc} \times Ef_{coc}) = Quantity of coal coke (Q_{coc}) \times the emission$

factor of MTCO2e (Efccc) for coal coke.

 $(Q_{pc} \times Ef_{pc}) = Quantity of petroleum coke (Fee Regulation only) (Q_{pc}) x the emission factor <u>of MTCO_2e</u> (Ef_{pc}) for petroleum coke (Fee Regulation only).$

- Q_{cc} = Statewide quantity of emissions (MTCO₂e) from catalyst coke (Fee Regulation only), except that used in an electricity generating facility.
- Q_{rga} = Statewide adjusted quantity of emissions (<u>MTCO₂e</u>) from refinery fuel gas, except that used in an electricity generating facility <u>subject to 95201(a)(4)</u>.
- Q_{ng} = Statewide quantity, in therms, of natural gas supplied for all uses except electricity generating facilities <u>subject to</u> <u>95201(a)(4)</u>-during the reporting period.
- $Ef_{ng} =$ Emission factor of MTCO₂<u>e</u> for natural gas.
- Q_{ag} = Statewide quantity of emissions (<u>MTCO₂e</u>) from associated gas <u>produced from on-site oil wells</u> (Fee Regulation only).
- <u>Q_{ngw} = Statewide quantity of emissions (MTCO₂e) from natural gas</u> produced from on-site gas wells.
- Q_g = Statewide quantity of gasoline supplied during the reporting period. This is the volumetric sum of California gasoline produced or imported into California and the amount of finished CARBOB product produced or imported into California. The finished CARBOB product is calculated as the volume sum of the CARBOB plus the maximum reported amount of oxygenate designated for each volume of CARBOB.
- $Ef_g =$ Emission factor of MTCO₂ for each supplied gallon of California gasoline.
- Q_d = Quantity of California diesel fuel supplied during the reporting period.
- $Ef_d =$ Emission factor of MTCO₂ for each supplied gallon of California diesel fuel.
- $(Q_e \times Ef_e) = Quantity of emissions from all electricity delivered in California as the sum of:$

 $(Q_{ie} \times Ef_{ie}) = Statewide quantity of MWh of in-state$ generated electricity (Q_{ie}) delivered multiplied by the facilityemission factor (MTCO₂e per MWh).

 $(Q_{sp} \times Ef_{sp}) = Quantity of MWh of electricity delivered from$

each specified source (Q_{sp}) multiplied by the emission factor (MTCO₂e per MWh) for that specified source;

 $(Q_{unsp} \times Ef_{unsp}) = Statewide quantity of MWh of electricity delivered from unspecified sources (Q_{unsp}) multiplied by the default emission factor (MTCO₂e per MWh) for unspecified sources.$

Minus

 $(Q_{qe} \times Ef_{unsp}) = Quantity of MWh of qualified exports (Q_{qe}) from each source multiplied by the emission factor (MTCO₂e per MWh) for unspecified sources.$

Minus

 $(Q_{RPS} \times Ef_{unsp}) = Quantity of MWh generated by each California eligible renewable resource (Q_{RPS}) located outside the State of California, claimed by the reporting entity, included in the reporting entity's emission data report and meeting requirements pursuant to section 95852(b)(4) of the Cap- and-Trade Regulation multiplied by the default emission factor (MTCO₂e per MWh) for unspecified sources.$

Q_{pe} = Quantity of process emissions from cement manufacturing.

(c) Fuel Fee Rate.

For entities reporting pursuant to section 95204(d)(1), (d)(2), (d)(3), (d)(5), (e), and (f)(1), and (f)(2), and (f)(3) the Executive Officer shall calculate a fuel fee rate for each fuel included in subsection 95203(b) using the following formula:

 $Fr_i = CCC \times Ef_i$

Where:

 Fr_i = Fuel fee rate for the fuel.

CCC = Common Carbon Cost.

 $Ef_i = Emission factor of MTCO_{2\underline{e}}$ for each unit of fuel supplied.

(d) Fuel Emission Factors.

For entities reporting pursuant to section 95204(d)(1), (d)(2), (d)(3), (d)(4), (d)(5), (e), (f)(1), and (f)(2), and (f)(3), the Executive Officer shall calculate the Common Carbon Cost and the Fuel fee rates using the following emissions factors: pursuant to the Mandatory Reporting Regulation. For

entities reporting pursuant to 95204(e) the Executive Officer shall calculate the emission factors using an arithmetic average of fuel grades taken from column C of 40 CFR 98 Table MM-1. For entities reporting pursuant to 95204(h), the Executive Officer shall calculate the Common Carbon Cost and fuel fee rates using the default clinker emission factor provided in the latest ARB GHG inventory

(http://www.arb.ca.gov/cc/inventory/inventory.htm), unless the entity reports a facility-specific clinker emission factor.

Fuel Type	CO ₂₋ Emission	Emission Factor
	Factor	Units
Coal		
Anthracite	2,597.94	kg CO ₂ / short ton
Bituminous	2,328.35	kg CO ₂ / short ton
Sub-bituminous	1,673.64	kg CO ₂ / short ton
Lignite	1,369.32	kg CO ₂ / short ton
Unspecified (Electric Power)	1,884.86	kg CO ₂ / short ton
Unspecified (Other Industrial)	2,082.89	kg CO ₂ / short ton
Petroleum coke (Fee Regulation	2,530.65	kg CO ₂ / short ton
only)		
Natural Gas	5.302	kg CO ₂ / therm
California Diesel Fuel	9.96	kg CO ₂₋ / gallon
California Gasoline	8.55	kg CO ₂ / gallon

(e) Electricity Fee Rate for electricity delivered in California prior to January 1, 2011.

The Executive Officer shall calculate an Electricity Fee Rate for each source of electricity delivered in California using the following formulas:

EFR_{sp} = CCC x EF_{sp} EFR_{asp} = CCC x EF_{asp} EFR_{usp} = CCC x EF_{usp}

Where:

"sp" denotes a specified source that is an electricity generating facility or unit.

"asp" denotes an asset-controlling supplier.

"usp" denotes an unspecified source.

EFR_{sp}=The Electricity fee rate for the specified source.

EFR_{asp} = The Electricity fee rate for the asset-controlling suppliers.

EFR_{usp} = The Electricity fee rate for unspecified sources.

EF_{sp} = Emission factor for specified source in MTCO₂ per MWh.

EF_{asp} = Emission factor for asset-controlling suppliers in MTCO₂ per MWh.

EF_{usp} = .499 MTCO₂ per MWh, the default Emission Factor for unspecified sources.

- (f <u>e</u>) Electricity Fee Rate for electricity delivered in California on or after January 1, 2011, and reported pursuant to section 95103 of the Mandatory Reporting Regulation.
 - (1) The Executive Officer shall calculate an Electricity Fee Rate for each MWh generated from a grid-dedicated, stand-alone electricity generating facility located in California that delivers electricity to the California transmission and distribution system using the following formula:

 $EFR = CCC \times EF$

Where:

EFR = The electricity fee rate for in-state generation.

EF = Emission factor in MTCO₂e per MWh.

(2) The Executive Officer shall calculate an Electricity Fee Rate for each source of electricity delivered imported, into California, using the following formulas:

 $EFR_{sp} = CCC \times <u>TL \times EF_{sp}$ </u>

EFR_{unsp} = CCC x TL x EF_{unsp}

Where:

"sp" denotes a specified source that is an electricity generating facility or unit.

"unsp" denotes an unspecified source.

EFR_{sp} = The Electricity fee rate for the specified source.

EFR_{unsp} = The Electricity fee rate for unspecified sources.

 EF_{sp} = Emission factor for specified source in MTCO₂e per MWh.

 $EF_{unsp} = \frac{.427 \text{ MTCO}_2}{0.428 \text{ MTCO}_2 e}$ per MWh, the default Emission Factor for unspecified sources.

TL = Transmission loss correction factor. <u>This is the applicable TL</u> as identified in Section 95111(b) of the Mandatory Reporting <u>Regulation.</u> TL = 1.02 to account for transmission losses between the busbar and measurement at the first point of receipt in California.

EF_{unsp} = 0 MT of CO₂/MWh for first points of receipt located inlinked jurisdictions.

(g f) Emission Factors for Specified Sources that are <u>grid-dedicated</u>, <u>stand-alone</u> Electricity Generating Facilities or <u>Units</u>, <u>Calculation Methods for Report</u> <u>Years 2008 through 2010</u>.

The Executive Officer shall calculate emission factors for specified sources of electricity that are generating units or facilities located in <u>California</u> using the following methodology:

 $EF_{sp} = \frac{E_{sp}}{EG}$ Where:

 $E_{sp} = CO_{2\underline{e}}$ emissions from <u>an</u> electricity generating facility for <u>a</u> specified electricity generating facility/unit for the report year (MTCO₂<u>e</u>)

EG = Net generation from a n specified electricity generating facility for the report year (MWh)

- (1) For specified <u>grid-dedicated</u>, <u>stand-alone</u> electricity generating facilities <u>located in California/units whose operators</u> <u>that</u> are subject to reporting or who voluntarily report under the Mandatory Reporting Regulation, Esp, shall be equal to the sum of CO₂<u>e</u> emissions from fossil fuel combustion, acid gas scrubbers, or acid gas reagents, as reported to ARB. Similarly, EG shall be the net generation reported to ARB.
- (2) For specified electricity generating facilities/units whose operators are not subject to Mandatory Reporting Regulation but who aresubject to the Acid Rain Program (40 CFR Part 75), E_{sp} shall be equal to the amount of CO₂ emissions reported to U.S. EPA pursuant to 40 CFR Part 75 for the facility in metric tons for the report year. EG shall be data reported to EIA and published in the EIA 923 Excel file for the reporting year available athttp://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html (the EIA data).
- (3) For specified electricity generating facilities whose operators do not report to ARB under the Mandatory Reporting Regulation and do notreport to U.S. EPA under the Acid Rain Program, EG shall be takenfrom the EIA data for the reporting year. E_{sp} shall be calculated using EIA data as shown below.

 $E_{sp} = 1000 \times \sum (Q_{fuel} \times EF_{fuel})$

Where:

Q_{fuel} = Heat of combustion for each specified fuel type from the specified electricity generating facility for the report year (MMBtu).

 $EF_{fuel} = CO_2$ emission factor for the specified fuel type as taken from the title 17, California Code of Regulations, Chapter 1 Subchapter 9, Article 2, Appendix A (kgCO₂/MMBtu).

(h g) Emission Factors for <u>Imported Electricity from</u> Specified Sources that are Electricity Generating Facilities or Units, Calculation Methods for-Report Years 2011 and Subsequent Years, for data reported pursuant to section <u>95103</u> <u>95111</u> of the Mandatory Reporting Regulation.

> Emission factors for <u>Imported Electricity from</u> Specified Sources that are Electricity Generating Facilities or units shall be facility specific or unit specific emission factors for the specified source published on the ARB Mandatory Reporting website calculated by ARB according to the methods in section 95111(b) of the Mandatory Reporting Regulation.

(i <u>h</u>) Emission Factors for Asset-Controlling Suppliers for Report Years 2008through 2010.

> The Executive Officer shall calculate emissions factors for assetcontrolling suppliers using the following pursuant to the methodology: in section 95111(b)(3) of the Mandatory Reporting Regulation.

Where:

 $\frac{\mathsf{EF}_{asp}}{\mathsf{EG}_{asp}} = \frac{\sum \mathsf{E}_{asp}}{\mathsf{EG}_{asp}} + \frac{\sum (\mathsf{PE}_{sp})^* \mathsf{EF}_{sp}}{\mathsf{EG}_{asp}} + \frac{\sum \mathsf{PE}_{sp}}{\mathsf{EF}_{sp}} + \frac{\sum \mathsf{PE}_{sp}}{\mathsf{EE}_{sp}} - \frac{\sum \mathsf{EF}_{sp}}{\mathsf{EE}_{sp}}$

 ΣE_{asp} = the sum of CO₂ emissions from fossil fuel combustion, acid gasscrubbers, or acid gas reagents from each specified electricity generatingfacility/unit in the asset-controlling supplier's fleet, as reported to ARBunder the Mandatory Reporting Regulation (MTCO₂).

 ΣEG_{asp} = the sum of net generation for each specified electricitygenerating facility/unit in the asset-controlling supplier's fleet for the reportyear as reported to ARB under the Mandatory Reporting Regulation-(MWh).

 ΣPE_{sp} = Sum of electricity purchased from specified sources by the assetcontrolling supplier for the year as reported to ARB under the Mandatory-Reporting Regulation (MWh). PE_{usp} = Amount of electricity purchased from unspecified sources by the asset-controlling supplier for the year as reported to ARB under the Mandatory Reporting Regulation (MWh).

 ΣSE_{sp} = Amount of wholesale electricity sold from a specified source by the asset-controlling supplier for the year as reported to ARB under the Mandatory Reporting Regulation (MWh).

EF_{sp}= CO₂-emission factor as defined for electricity generating units and facilities.

(<u>j</u> <u>i</u>) Fee Liability for Fuels.

The Executive Officer shall calculate the Fee Liability for each entity reporting pursuant to section 95204(d)(1-3), $\frac{(d)(5)}{(d)(5)}$ and (e), based on the quantity of each fuel supplied, consumed or produced, as follows:

 $FS_i = (FR_i \times QF_i)$

Where:

 FS_i = The Fee for each entity (\$).

 FR_i = Fuel fee rate for the fuel.

 $QF_i = Quantity of fuel.$

(Note: The Fee Liability calculation formula for associated gas (Fee Regulation only) is addressed under section 95203(k))

- (k j) Fee Liability for Facilities that Combust Coal, <u>Coal Coke</u>, Petroleum Coke (Fee Regulation only), Catalyst Coke (Fee Regulation only), or Refinery Fuel Gas.
 - (1) Coal. Coal Coke, and Petroleum Coke (Fee Regulation only)

The Executive Officer shall calculate the Fee Liability for each entity reporting pursuant to sections 95204(f)(1), and 95204(f)(2), and 95204(f)(3), based on the quantity of each fuel consumed as follows:

 $FS_i = (FR_i \times QF_i)$

Where:

 FS_i = The Fee for each entity (\$).

 $FR_i = Fuel fee rate for the fuel.$

 $QF_i = Quantity of fuel.$

(2) Catalyst Coke (Fee Regulation only) and Refinery Fuel Gas

For entities reporting pursuant to sections 95204(f)(3),and 95204(f)(4) and 95204(f)(5), each entity shall be charged a Fee based on the total number of MTCO₂ emitted and reported annually. The fee shall be calculated as follows:

 $FS_i = CCC \times QE_i$

Where:

 $FS_i = The Fee for the <u>Eentity ($)</u>.$

CCC = Common Carbon Cost.

 QE_i = the total amount of emissions associated with the catalyst coke (Fee Regulation only) or refinery fuel gas, as applicable.

- (<u>k</u>) Fee Liability for Electricity Delivered in California.
 - (1) The Executive Officer shall calculate the fee liability for griddedicated, stand-alone electricity generating facilities located in California reporting pursuant to section 95204(g) based on the quantity of MWh delivered to the California transmission and distribution grid, as follows:

 $FS = CCC \times EFR$

Where:

FS = Fee for each entity (\$).

EFR = Electricity fee rate for electricity generated.

(2) The Executive Officer shall calculate the fee liability for each entity electricity importer reporting pursuant to section 95204(g) based on the quantity of electricity delivered less ARB's calculated fee liability for qualified exports and RPS MWh specified below as QM_{RPS}, as follows:

$$FS_{i} = \sum (EFR_{d} \times QM_{d}) - \sum (EFR_{unsp} \times QM_{qe}) - \sum (EFR_{unsp} \times QM_{RPS})$$

Where:

 $FS_i = Fee \text{ for each entity ($).}$

 QM_d = Quantity of MWh of electricity delivered in California from

each specified source or unspecified source, as appropriate.

 EFR_d = Electricity fee rate for electricity from each specified source or unspecified source, as appropriate.

 \sum (EFR_{unsp} x QM_{qe}) = Sum of products for each hour in which the entity exports electricity.

 QM_{qe} = Quantity of MWh from qualified exports as the lower of either the quantity of exports or imports for the hour.

 QM_{RPS} = Quantity of MWh generated by each California eligible renewable resource located outside the State of California, procured by the reporting entity, registered with ARB pursuant to section 95111(g)(1) of the Mandatory Reporting Regulation and meeting requirements pursuant to section 95852(b)(4) of the Cap-and-Trade Regulation.

(m <u>I</u>) Fee Liability for Entities.

For entities reporting pursuant to section 95204(d)(4), and 95204(d)(65), and 95204(h), each entity shall be charged a fee based on the total number of MTCO₂ emitted and reported annually. The fee shall be calculated as follows:

 $FS_i = CCC \times QE_i$

Where:

 $FS_i = Fee \text{ for the } Eentity (\$).$

CCC = Common Carbon Cost.

 QE_i = Total amount of emissions associated with the entity.

(m) Fee Liability for Cement Manufacturers.

For cement manufacturers reporting pursuant to section 95204(h), a fee shall be charged based on the total amount of process emissions from the production of clinker reported annually. The fee shall be calculated as follows:

 $FS = CCC \times QC \times EF$

Where:

FS = The Fee for the entity (\$).

CCC = Common Carbon Cost.

QC = Total amount of clinker produced.

EF = Emission factor for clinker process emissions.

NOTE: Authority cited: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: 38501, 38510, 38597, 39600 and 39601, Health and Safety Code.

§ 95204. Reporting and Recordkeeping Requirements.

(a) Reporting Format.

All reports required by this subarticle must be submitted to ARB by using the California Air Resources Board's Greenhouse Gas Reporting Tool, as specified in title 17, California Code of Regulations, section 95104(e), or any other reporting tool approved by the Executive Officer that will guarantee transmittal and receipt of data required by ARB's Mandatory Reporting Regulation and this subarticle. The Reporting Tool is available on ARB's internet website at [www.arb.ca.gov].

- (b) All reporting entities subject to this subarticle must report the following
 - (1) Report Information:
 - (A) Report year
 - (B) Facility information
 - 1. Official responsible for payment
 - 2. Facility name
 - 3. Physical address
 - 4. Mailing address
 - 5. Billing address
 - 6. Description of facility geographic location

(C) Electricity Importer and fuel supplier Information:

- 1. Entity name
- 2. Email address
- 3. Telephone number
- 4. Official responsible for payment
- 5. Mailing address
- 6. Billing address
- (2) Entity Statement of Truth, Accuracy and Completeness.

Entity signature and date stating: This report has been prepared in accordance with the AB 32 Cost of Implementation Fee Regulation (subchapter 10, article 3, subarticle 1, sections 95200 to 95207, title 17, California Code of Regulations). The statements and information

contained in this emissions data report are true, accurate and complete. All entities subject to this subarticle are required to certify reports pursuant to the requirements of Section 95104 of the Mandatory Reporting Regulation.

- (c) Timeline for Reporting.
 - (1) Reports from each affected entity for the 2008 calendar year data and the 2009 calendar year must be submitted to ARB by August 16, 2010.
 - (2) Reports for each affected entity for the 2010 report year and the 2011 report year data must be submitted to ARB by June 30 of the following year.
 - (3 1) Reports for each affected entity, excluding including electricity importers, for the 2012 report year and subsequent each report years must be submitted to ARB no later than April 10 of the following year and each year thereafter pursuant to 95103(e) of the Mandatory Reporting Regulation.
 - (4) Each electricity importer required to report under this subarticle mustsubmit a report for the 2012 and subsequent report years to ARBpursuant to section 95103(e) of the Mandatory Reporting Regulation.
- (d) Natural Gas Utilities, Users and Pipeline Owners and Operators.
 - (1) All public utility gas corporations and publicly owned natural gas utilities operating in California must annually report the aggregate quantity of therms of natural gas delivered at the meter to all end users, including the aggregate quantity of therms of natural gas delivered to electricity generating facilities, pursuant to section 95122(b)-(d) of the Mandatory Reporting Regulation.
 - (2) All owners or operators of intrastate pipelines that deliver natural gas directly to end users must annually report the aggregate quantity oftherms of natural gas directly delivered at the meter to all end users, including the aggregate quantity of therms of natural gas delivered to electricity generating facilities, <u>pursuant to section 95122(b)-(d) of</u> the Mandatory Reporting Regulation.
 - (3) All owners or operators that are end users of natural gas received directly from interstate pipelines, except for electricity generating facilities <u>subject to section 95201(a)(4)</u> and facilities that combust orconsume less than 100,000 therms of natural gas received directlyfrom an interstate pipeline in a reporting year, must annually report the therms of natural gas directly delivered, at the meter from the interstate pipeline(s) <u>pursuant to the reporting requirements of the</u>

applicable section of the Mandatory Reporting Regulation.

- (4) All owners or operators of interstate pipelines that deliver natural gas directly to end users must annually report the following information for each end user directly receiving 100,000 therms of natural gas or more in a reporting year: name, contact address, facility address, and contact phone number.
- (5 4) All California owners or operators that consume natural gas produced on-site and are subject to the verification requirements in Section 95103 of Mandatory Reporting Regulation must report the quantity of therms emissions resulting from the combustion or consumption of natural gas consumed annually of natural gas that is produced from on-site gas wells, excluding natural gas consumed by an electricity generating facility subject to 95201(a)(4), in addition to all information required under the Mandatory Reporting Regulation.
- (6 5) All California owners or operators that consume associated gas (Fee-Regulation only) produced from on-site oil wells and that are subject to the verification requirements in Section 95103 of Mandatory Reporting Regulation must report all information required by the Mandatory Reporting Regulation, including the quantities of emissions resulting from the combustion of these fuels, excluding associated gas produced on-site and consumed by on-site electricity generating facilities subject to section 95201(a)(4).
- (7 6) The Executive Officer shall calculate the fee liability for Natural Gas Utilities, Users and Pipeline Owners and Operators based on reported data less ARB's calculated fee liability from deliveries to Electricity Generating Facilities which are customers of the supplier.
- (8 <u>7</u>) For report years 2011 and subsequent years, reported pursuant to 95204(c), the<u>The</u> Executive Officer shall provide the Natural Gas Utility, User or Pipeline Owner and Operator a listing of all customers subtracted from the supplier's natural gas delivered, no later than September 1 of the corresponding fee determination notice fiscal year.
- (e) Producers and Importers of Gasoline and Diesel Fuels.

All producers and importers of California gasoline, CARBOB or California diesel fuel must report the total amount of each variety of fuel sold or supplied for use in California which they produced or imported <u>pursuant to</u> the reporting requirements of section 95113(m) or 95121(d) of the <u>Mandatory Reporting Regulation</u>. Producers and importers of CARBOB must report the designated volume/volumes of oxygenate associated with each volume of CARBOB <u>pursuant to the reporting requirements of the Mandatory Reporting Regulation</u>.

(f) Coal, <u>Coal Coke</u>, Catalyst Coke, Petroleum Coke, or Refinery Gas Combustion or Consumption.

All entities that are subject to the verification requirements in Section 95103 of the Mandatory Reporting Regulation, except for electricity generating facilities, must report the following information for each of the following substances that are combusted as fuel or consumed as feedstock <u>pursuant to the applicable sections of the Mandatory</u> <u>Reporting Regulation</u>:

(1) Coal;

The number of tons of coal and the grade of coal combusted or consumed in each calendar year must be reported.

- (2) <u>Coal Coke:</u> <u>The number of tons of coal coke combusted or consumed in each</u> <u>calendar year.</u>
- (2 <u>3</u>) Petroleum coke (Fee Regulation only); The number of tons of petroleum coke (Fee Regulation only) combusted or consumed in each calendar year must be reported.
- (3 <u>4</u>) Catalyst coke (Fee Regulation only); The quantity of emissions from combustion as reported each calendar year under the applicable section of the Mandatory Reporting Regulation must be reported.
- (4 5) Refinery fuel gas;

The quantity of emissions from combustion or consumption as reported each calendar year under the applicable section of the Mandatory Reporting Regulation must be reported. If known by the reporting entity, the quantity of emissions from natural gas or any remaining useful refinery fuel gas generated from the combustion or consumption of natural gas can be excluded. To exclude the quantity of emissions from natural gas, the following method shall be used:

 $Q_{rga}=Q_{rg}$ - ($Q_{ng} \times EF_{ng}$) - Q_{rgr}

Where:

Q_{rga} = Adjusted quantity of emissions from refinery gas.

 Q_{rg} = Quantity of emissions from refinery gas reported through the Mandatory Reporting Regulation.

 Q_{ng} = Quantity of natural gas.

EF_{ng} = Default emission factor for natural gas found in 95203(d).

 Q_{rgr} = Quantity of emissions from any remaining useful refinery fuel gas generated from the combustion or consumption of natural gas.

(g) First Deliverers of Electricity.

- (1) *Electrical Generating Facilities*. All electricity generating facilities shall provide the same information that is required to be submitted under the Mandatory Reporting Regulation. This information must be reported on the same schedule specified in the Mandatory Reporting Regulation.
- (2) *Electricity Importers.* All electricity importers must report all information required to be submitted under the Mandatory Reporting Regulation.
- (h) Cement Manufacturers.

All cement manufacturers must report all information required under the Mandatory Reporting Regulation, and must also report the total amount of process emissions resulting from their operations, as defined in this subarticle.

(i) Records Retention.

Entities subject to this subarticle must maintain copies of the information reported pursuant to this subarticle the applicable sections of the <u>Mandatory Reporting Regulation</u> and provide them to an authorized representative of ARB within five business days upon request. Records must be kept at a location within the State of California for five years.

NOTE: Authority cited: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: 38501, 38510, 38597, 39600 and 39601, Health and Safety Code.