Appendix A

Proposed Regulation for the
AB 32 Cost of Implementation Fee
and Proposed Amendments to the Mandatory
Reporting of Greenhouse Gas Emissions
Regulations

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AB 32 COST OF IMPLEMENTATION FEE

Adopt new article 3, sections 95200 to 95207, title 17, California Code of Regulations, to read as follows:

(Note: All of the following is new language to be added to the California Code of Regulations.)

Article 3: Fees for Sources of Greenhouse Gas Emissions

95200. Purpose.

The purpose of this article is to collect fees to be used to carry out the California Global Warming Solutions Act of 2006 (Stats. 2006; Ch. 488; Health and Safety Code sections 38500 *et seq.*), as provided in Health and Safety Code section 38597.

NOTE: Authority cited: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38530 and 39600, Health and Safety Code.

95201. Applicability.

- (a) This article 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 distribute or use natural gas in California.
 - (A) All public utility gas corporations operating in California. Fees shall be paid for each therm of natural gas delivered to any end user in California.
 - (B) All owners or operators of interstate and intrastate pipelines, not included in subsection (a)(1)(A), that distribute natural gas directly to end users in California. Fees shall be paid for each therm of natural gas directly distributed by interstate or intrastate pipelines.
 - (C) All California owners or operators that consume natural gas produced on-site and that are subject to Mandatory Reporting Regulation. Fees shall be paid for each therm of natural gas consumed of the natural gas produced on-site.
 - (D) All California owners or operators that consume associated gas that is produced on-site and that are subject to the

Mandatory Reporting Regulation. Fees shall be paid on the amount of emissions resulting from the combustion of these fuels.

- (2) Producers and Importers of Gasoline and Diesel Fuels.
 - (A) All producers and importers of California gasoline or California diesel for use in California. Fees shall be paid for each gallon of gasoline or diesel fuel distributed.
 - (B) All producers or importers of CARBOB. Fees shall be paid for each gallon of CARBOB plus the designated amount of oxygenate.

(3) Refineries.

Fees shall be paid on the amount of emissions by the owner or operator of any refinery that emits process emissions resulting from the steam methane reforming process, or the production or consumption of:

- (A) Catalyst coke;
- (B) Petroleum coke; or
- (C) Refinery gas.
- (4) Cement Manufacturers.

All entities or operators of cement manufacturing facilities that emit greenhouse gases through the clinker manufacturing process. Fees shall be paid on reported quantities of emissions.

(5) Retail Providers and Marketers of Imported Electricity.

Any retail provider or marketer that is the purchasing/selling entity at the first point of delivery in California of imported electricity. Fees shall be paid for each megawatt-hour of imported electricity.

(6) Facilities that Combust Coal.

Any owner or operator of a facility that combusts coal in California and is subject to the Mandatory Reporting Regulation. Fees shall be paid on the reported emissions.

- (b) This article does not apply to any of the following fuels, or to emissions resulting from combustion of any of the following fuels:
 - (1) aviation gasoline;
 - (2) jet fuel;
 - (3) kerosene;
 - (4) liquefied petroleum gas;
 - (5) biodiesel;
 - (6) renewable diesel;
 - (7) residual fuel oil;
 - (8) propane; or
 - (9) any fuel exported for use outside of California.

NOTE: Authority: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505 and 39300, Health and Safety Code.

95202. Definitions.

- (a) For the purposes of this article, the following definitions shall apply:
 - (1) "AB 32" means the California Global Warming Solutions Act of 2006, Assembly Bill 32, Chapter 488, Statutes of 2006, as codified at Health and Safety Code section 38500 *et seq*.
 - (2) "Annual" means with a frequency of once a year; unless otherwise noted, annual events such as the fee payment and liability will be based on the calendar year.
 - (3) "ARB" or "Board" means the California Air Resources Board.
 - (4) "Asset-controlling supplier" means any entity that operates electricity generating facilities or serves as an exclusive marketer for certain generating facilities even though it does not own them, and assigned a supplier-specific identification number for its fleet of generating facilities under the provisions of article 2, title17 of the California Code of Regulations.
 - (5) "Asset-owning supplier" means any entity that owns electricity generating facilities that deliver electricity to a transmission or

- distribution line, and is assigned a supplier-specific identification number for its fleet of generating facilities under the provisions of article 2, title 17 of the California Code of Regulations.
- (6) "Associated gas" means hydrocarbon-based gaseous fuel produced in association with crude oil from any oil well and subsequently burned in the field as a fuel.
- (7) "Biodiesel" means a diesel fuel substitute produced from nonpetroleum renewable resources that meet the registration requirements for fuels and fuel additives established by the Environmental Protection Agency under section 211 of the Clean Air Act. It includes biodiesel meeting all of the following:
 - (A) Registered as a motor vehicle fuel or fuel additive under title 40, Code of Federal Regulations, part 70;
 - (B) A mono-alkyl ester;
 - (C) Meets American Society for Testing and Material designation ASTM D 6751-08 (Standard Specification for Biodiesel Fuel Blendstock (B100) for Middle Distillate Fuels);
 - (D) Intended for use in engines that are designated to run on conventional diesel fuel; and
 - (E) Derived from nonpetroleum renewable resources.
- (8) "Calendar year" means the time period from January 1 through December 31.
- (9) "California gasoline" has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).

For California gasoline,

- (A) "Produce" for California gasoline has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).
- (B) "Producer" for California gasoline has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).
- (C) "Supply" for California gasoline has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).

- (D) "Importer" for California gasoline means the majority owner of the California gasoline when it first enters the state of California. For rail cars, cargo tanks, and pipelines it is the point where the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.
- (E) "Import" for California gasoline means movement of California gasoline into the state of California. For rail cars, cargo tanks, and pipelines it is when the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.
- (10) "California reformulated gasoline blendstock for oxygenate blending, or "CARBOB," has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).

For CARBOB.

- (A) "Produce" for CARBOB has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).
- (B) "Producer" for CARBOB has the same meaning as defined in title 13 of the California Code of Regulations, section 2260 (a).
- (C) "Supply" for CARBOB has the same meaning as defined in title 13 of the California Code of Regulations, section 2260(a).
- (D) "Importer" for CARBOB means the majority owner of the CARBOB when it first enters the state of California. For rail cars, cargo tanks, and pipelines it is the point where the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.
- (E) "Import" for CARBOB means movement of CARBOB into the state of California. For rail cars, cargo tanks, and pipelines it is when the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.

(11) "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 of the California Code of Regulations, section 2282(b).
- (B) "Producer" for California diesel fuel has the same meaning as "Vehicular Diesel Fuel" as defined in title 13 of the California Code of Regulations, section 2282(b).
- (C) "Supply" for California diesel fuel has the same meaning as defined in title 13 of the California Code of Regulations, section 2282(b).
- (D) "Importer" for California diesel fuel means the majority owner of the California diesel fuel when it first enters the state of California. For rail cars, cargo tanks, and pipelines it is the point where the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.
- (E) "Import" for California diesel fuel means movement of product into the state of California. For rail cars, cargo tanks, and pipelines it is when the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.
- (12) "Carbon dioxide" or "CO₂" means the most common of the six primary greenhouse gases, consisting on a molecular level of a single carbon atom and two oxygen atoms.
- (13) "Carbon dioxide equivalent" or "CO₂E" or "CO₂ equivalent" means a measure for comparing carbon dioxide with other greenhouse gases, based on the quantity of those gases multiplied by the appropriate global warming potential factor and commonly expressed as metric tons of carbon dioxide equivalents (MTCO₂E).
- (14) "Catalyst" means a substance added to a chemical reaction, which facilitates or causes the reaction, and is not consumed by the reaction.
- (15) "Catalyst coke" means carbon that is deposited on a catalyst, thus deactivating the catalyst.

- (16) "Cement" means a building material that is produced by heating mixtures of limestone and other minerals or additives at high temperatures in a rotary kiln to form clinker, followed by cooling and grinding with blended additives. Finished cement is a powder used with water, sand and gravel to make concrete and mortar.
- (17) "Cement manufacturer" means an owner or operator of a cement plant.
- (18) "Cement plant" means an industrial structure, installation, plant or building primarily engaged in manufacturing Portland, natural, masonry, pozzolanic, and other hydraulic cements, and typically identified by North American Industry Classification System Code 327310.
- (19) "Clinker" means the mass of fused material produced in a cement kiln from which finished cement is manufactured by milling and grinding.
- (20) "Coal" means all solid fuels classified as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Material Designation ASTM D388-05 "Standard Classification of Coals by Rank."
- (21) "Combust" means the process of burning or setting fire to a fuel.
- (22) "Combustion emissions" means greenhouse gas emissions occurring during the exothermic reaction of a fuel with oxygen.
- (23) "Cracking" means the process of breaking down larger molecules into smaller molecules, utilizing catalysts and/or elevated temperatures and pressures.
- (24) "Debt" means those loans obtained by the Board and required by the Legislature to be repaid to carry out AB 32 for fiscal years 2007/08, 2008/09, and any loans necessary for the 2009/10 fiscal year.
- (25) "Electricity Fee Rate" means the rate charged per MWh of imported electricity generated at a specified source or an unspecified source based on source-specific emissions factors, or a default emissions factor for unspecified sources.
- (26) "Emissions" means the release of greenhouse gases into the atmosphere from sources and processes in a facility.

- (27) "Emissions data report" or "greenhouse gas emissions data report" or "report" means the report prepared by an operator each year and submitted by electronic means to ARB to comply with this article.
- (28) "Emissions factor" means a unique value for determining an amount of a greenhouse gas emitted for a given quantity of activity (e.g., metric tons of carbon dioxide emitted per gallon of gasoline burned).
- (29) "End user" means either:
 - (A) the point to which natural gas is delivered for consumption, or
 - (B) a publicly-owned natural gas utility that further distributes natural gas for consumption.
- (30) "Entity" means a person, firm, association, organization, partnership, business trust, corporation, limited liability company, company, government agency, or public district.
- (31) "Exclusive marketer" means a marketer that has exclusive rights to market electricity for a generating facility or group of generating facilities.
- (32) "Executive Officer" means the Executive Officer of ARB or his or her delegate.
- (33) "Facility" means any property, plant, building, structure, stationary source, stationary equipment or grouping of stationary equipment or stationary sources located on one or more contiguous or adjacent properties, in actual physical contact or separated solely by a public roadway or other public right-of-way, and under common operational control, that emits or may emit any greenhouse gas. Operators of military installations may classify such installations as more than a single facility based on distinct and independent functional groupings within contiguous military properties.
- (34) "Fee determination notice" means the notice provided by ARB to entities regulated by this article stating the dollar amount due for the current calendar year.
- (35) "Feedstock" means the raw material supplied to a process.
- (36) "Fiscal year" means the time period from July 1 to June 30.

- (37) "Fuel" means solid, liquid or gaseous combustible material.
- (38) "Fuel fee rate" means the rate charged per MTCO₂ produced by greenhouse gas sources specific to the fuel combusted and calculated by ARB.
- (39) "Gallon" means the United States gallon of 231 cubic inches or the volumetric gallon adjusted to 60 degrees Fahrenheit when the invoice and settlement is made on the temperature corrected gallonage.
- (40) "Generating facility" means an existing or planned location or site at which electricity is or will be produced.
- (41) "Generating unit" means any combination of physically connected generator(s), reactor(s), boiler(s), combustion turbine(s), or other prime mover(s) operated together to produce electric power.
- (42) "Global warming potential" or "GWP factor" means the radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time.
- (43) "Government agency" means any agency as defined in Government Code section 11000.
- (44) "Greenhouse gas source" means any physical unit, process, or other use or activity that releases a greenhouse gas into the atmosphere.
- (45) "Imported electricity" means electricity that is generated outside of California and delivered into California. Imported electricity does not include power wheeled through California, which is power that is imported into California that terminates in a location outside of California.
- (46) "Importer" means the majority owner of the California gasoline, CARBOB, or California diesel fuel when it first enters the state of California. For rail cars, cargo tanks, and pipelines it is the point where the product first crosses the California state border. For imports by marine vessel it is the point where the fuel leaves the vessel.

- (47) "Interstate Pipeline" means any entity engaged in natural gas transportation subject to the jurisdiction of the Federal Energy Regulatory Commission (FERC) under the Natural Gas Act.
- (48) "Kerosene" means a light distillate fuel that includes No. 1-K and No. 2-K as well as other grades of range or stove oil that have properties similar to those of No. 1 fuel oil.
- (49) "Mandatory Reporting Regulation" means ARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, as set forth in title 17, California Code of Regulations, Chapter 1, Subchapter 10, article 2 (commencing with section 95100).
- (50) "Marketer" means a purchasing/selling entity that is not a retail provider, and that is the purchaser/seller at the first point of delivery in California for electric power imported into California, or the last point of receipt in California for power exported from California.
- (51) "Megawatt-hour" or "MWh" means the electrical energy unit of measure equal to one million watts of power supplied to, or taken from, an electric circuit steadily for one hour.
- (52) "Meter" means a device designed to measure, record or regulate the amount or volume of the flow of a gas.
- (53) "Metric ton" or "MT" or "tonne" means a common international measurement for the quantity of greenhouse gas emissions, equivalent to about 2204.6 pounds, or 1.1 short tons.
- (54) "Motor vehicle" has the same meaning as defined in section 415 of the Vehicle Code.
- (55) "Natural gas" means a naturally occurring mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions.
- (56) "Natural gas importer" means any entity that receives natural gas from a party that is not a public gas corporation, as defined in this article that consumes and/or distributes natural gas to consumers of natural gas.
- (57) "Operational control" for a facility subject to this article means the entity that has authority to introduce and implement operating, environmental, health and safety policies.

- (58) "Operator" means the entity having operational control of a facility.
- (59) "Owner" means the entity having title of the property or assets which are subject to the fee.
- (60) "Payment period" means 60 days from the receipt of the billing, as stated in section 95205 each calendar year.
- (61) "Petroleum coke" means a solid residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking.
- (62) "Petroleum refinery" or "refinery" means any facility engaged in producing gasoline, aromatics, kerosene, distillate fuel oils, residual fuel oils, lubricants, asphalt, or other products through distillation of petroleum or through redistillation, cracking, rearrangement or reforming of unfinished petroleum derivatives.
- (63) "Power" means electricity, except where the context makes clear that another meaning is intended.
- (64) "Process" means the intentional or unintentional reactions between substances or their transformation, including, but not limited to, the chemical or electrolytic reduction of metal ores, the thermal decomposition of substances, and the formation of substances for use as product or feedstock.
- (65) "Process emissions" means:
 - (A) For cement manufacturing: The greenhouse gas process emissions produced through the chemical reactions of feedstock during pyroprocessing to produce cement clinker (which does not include greenhouse gas emissions which are the result of fuel combustion emissions).
 - (B) For refineries:
 - 1. the greenhouse gas emissions resulting from the on-site consumption of catalyst coke, and
 - 2. all greenhouse gas emissions both on- and off-site, resulting from the combustion of petroleum coke and refinery gas in California, and
 - 3. the greenhouse gas emissions resulting from the steam methane reforming process excluding those that occur as a result of the use of natural gas as a feedstock.

- (66) "Producer" means any person who owns, leases, operates, controls or supervises a California production facility.
- (67) "Production facility" means a facility in California at which gasoline or CARBOB is produced. Upon request of a producer, the Executive Officer may designate, as part of the producer's production facility, a physically separate bulk storage facility which (A) is owned or leased by the producer, and (B) is operated by or at the direction of the producer, and (C) is not used to store or distribute gasoline or CARBOB that is not supplied from the production facility.
- (68) "Propane" means a normally straight chain hydrocarbon that boils at -3.67 degrees Fahrenheit and is represented by the chemical formula C₃H₈.
- (69) "Publicly-owned utility" means a municipality or municipal corporation, a municipal utility district, a public utility district, or a joint powers authority that includes one or more of these agencies that furnishes natural gas services to end users.
- (70) "Public utility gas corporation" is a gas corporation defined in California Public Utilities Code section 222 that is also a public utility as defined in California Public Utilities Code section 216.
- (71) "Purchasing/selling entity" means an entity that is eligible to purchase or sell energy or capacity and reserve transmission services.
- (72) "Renewable diesel" means a motor vehicle or fuel additive which is all of the following:
 - (A) Registered as a motor vehicle fuel or fuel additive under 40 CFR part 79;
 - (B) Not a mono-alkyl ester;
 - (C) Intended for use in engines that are designated to run on conventional diesel fuel; and
 - (D) Derived from nonpetroleum renewable resources.
- (73) "Report Year" means the calendar year for which emissions are being reported in the emissions data report.

- (74) "Retail provider" means an entity that provides electricity to retail end users in California and is an electric corporation as defined in Public Utilities Code section 218, electric service provider as defined in Public Utilities Code section 218.3, local publicly owned electric utility as defined in Public Utilities Code section 9604, community choice aggregator as defined in Public Utilities Code section 331.1, or the Western Area Power Administration.
- (75) "Source" means greenhouse gas source.
- (76) "Specified source" or "specified source of power" means a particular generating unit or facility for which electrical generation can be confidently tracked due to full or partial ownership or due to its identification in a power contract including any California eligible renewable resource, or an asset-owning or asset-controlling supplier.
- (77) "Stationary" means neither portable nor self propelled, and operated at a single facility.
- (78) "Steam methane reforming process" means a method in which high temperature steam is used to produce hydrogen from a methane source.
- (79) "Therm" means a unit of heat equal to 100,000 British thermal units $(1.054 \times 10^8 \text{ joules})$.
- (80) "Ton" means a short ton equal to 2000 pounds.
- (81) "Unspecified source of power" or "unspecified source" means electricity generation that cannot be matched to a particular generating facility.

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 2009/2010, 2010/2011, 2011/2012, 2012/2013, and 2013/2014, the RR shall also include the payments required to be made by ARB on the Debt.
- (3) The RR shall also include any amounts required to be expended by ARB in defense of this article in court.
- (4) If there is any excess or shortfall in the actual revenue collected for any fiscal year, or if any collections are less than the Revenue Requirement, such shortfall or excess shall be carried over to the next year's calculation of the Total Revenue Requirement. The annual Total Revenue Requirement is equal to the annual RR adjusted for the previous fiscal year's excess or shortfall amount.
- (b) Common Carbon Cost (CCC).

The Executive Officer shall calculate a Common Carbon Cost (CCC), which represents the cost per MTCO₂ emitted. The CCC shall be calculated in accordance with the following formula:

$$CCC = \frac{TRR}{(Q_c \times EF_c) + (Q_{ng} \times EF_{ng}) + (Q_g \times EF_g) + (Q_d \times EF_d) + (Q_{ie} \times EF_{ie}) + TE_1}$$

Where

TRR = Total Required Revenue, as specified in subsection 95203(a).

(Q_c x EF_c) = Statewide total quantity of emissions from coal calculated as the sum of:

 $(Q_b \times EF_b)$ = Quantity of bituminous coal $(Q_b) \times EF_b$ emission factor for bituminous coal (EF_b) ;

 $(Q_1 \times EF_1)$ = Quantity of lignite coal $(Q_1) \times EF_1$ the emission factor (EF_1) for lignite coal:

 $(Q_a \times EF_a)$ = Quantity of anthracite coal $(Q_a) \times EF_a$ the emission factor (EF_a) for anthracite coal;

 $(Q_{sb} \times EF_{sb}) = Quantity of subbituminous coal <math>(Q_{sb})x$ the emission factor (EF_{sb}) for subbituminous coal;

Q_{ng} = Statewide quantity in therms of natural gas supplied during the reporting period

- $\mathsf{EF}_{\mathsf{ng}} = \mathsf{Emission} \; \mathsf{Factor} \; \mathsf{of} \; \mathsf{MTCO}_2 \; \mathsf{for} \; \mathsf{each} \; \mathsf{supplied} \; \mathsf{therm} \; \mathsf{of} \; \mathsf{natural} \; \mathsf{gas}$
- 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 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 diesel fuel
- (Q_{ie} x EF_{ie}) = Total CO₂ emissions from total imported electricity as the sum of:

 $(Q_{sp} \times EF_{sp})$ = Quantity of MWh of electricity imported from each specified source x emission factor for that specified source

 $(Q_{usp} \times EF_{usp})$ = Statewide quantity of MWh of electricity imported from unspecified sources x emission factor for unspecified source.

TE_I = Total state process emissions inventory for cement manufacturers and refineries, and emissions from the combustion of associated gas.

(c) Fuel Fee Rate.

For entities reporting pursuant to section 95204(d)(1-3), (e) and (f) 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 = The Fuel Fee Rate for the fuel

CCC = Common Carbon Cost

 $EF_i = Emission Factor of MTCO_2$ for each unit of fuel supplied.

(d) Fuel Emission Factors.

For entities reporting pursuant to section 95204(d)(1-3), (e) and (f) the Executive Officer shall calculate the Common Carbon Cost and the Fuel Fee Rates using the following emissions factors:

Fuel Type	CO ₂ Emission Factor	Emission 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
Natural Gas	5.302	kg CO ₂ / therm
Diesel	9.96	kg CO ₂ / gallon
Gasoline	8.55	kg CO ₂ / gallon

(e) Imported Electricity Fee Rate.

The Executive Officer shall calculate an Imported Electricity Fee Rate for each affected entity pursuant to section 95204(f) using the following formulas:

$$EFR_{sp} = CCC \times EF_{sp}$$

 $EFR_{asp} = CCC \times EF_{asp}$
 $EFR_{usp} = CCC \times EF_{usp}$

Where:

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

"asp" denotes an asset-owning or asset-controlling supplier

"usp" denotes an unspecified source

CCC = Common Carbon Cost

EFR_{sp} =The Electricity Fee Rate for the specified source

EFR_{asp} = The Electricity Fee Rate for the asset-owning and 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-owning and asset-controlling suppliers in MTCO₂ per MWh

 $\mathsf{EF}_{\mathsf{usp}} = 0.499 \, \mathsf{MTCO}_2 \, \mathsf{per} \, \mathsf{MWh}$, the default Emission Factor for unspecified sources.

(f) Emissions Factors for Generating Units or Facilities of Imported Electricity.

The Executive Officer shall calculate emissions factors for specified sources of imported electricity that are generating units or facilities using the following methodology:

$$EF_{sp} = \underline{E}_{sp}$$
 EG

Where:

 $\mathsf{EF}_\mathsf{sp} = \mathsf{Emission}$ Factor for specified source "sp", in MTCO₂ per MWh

 $E_{sp} = CO_2$ emissions from electricity generation for a specified electric generating facility/unit for the report year (MTCO₂)

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

- (1) For specified electric generating facilities/units whose operators are subject to reporting or who voluntarily report under the Mandatory Reporting Regulation, E_{sp} shall be equal to the sum of CO_2 emissions directly associated with electricity generation as reported to ARB. Similarly, EG shall be the net generation reported to ARB.
- (2) For specified electric generating facilities/units whose operators are not subject to Mandatory Reporting Regulation but who are subject 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 at http://www.eia.doe.gov/cneaf/electricity/page/eia906_920.html (the EIA data).

(3) For specified electric generating facilities whose operators do not report to ARB under the Mandatory Reporting Regulation and do not report to U.S. EPA under the Acid Rain Program, EG shall be taken from the EIA data for the reporting year. E_{sp} shall be calculated using EIA data as shown below.

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

Where:

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

EF_{fuel} = CO₂ emission factor for the specified fuel type as taken from the title 17, California Code of Regulations, Chapter1 Subchapter 9, Article 2, Appendix A (kgCO₂/MMBtu)

(g) Emission Factors for Asset Owning/Controlling Suppliers.

The Executive Officer shall calculate emissions factors for assetowning or asset-controlling suppliers using the following methodology:

$$\mathsf{EF}_{\mathsf{asp}} = \underbrace{\sum \mathsf{E}_{\mathsf{asp}} + \sum (\mathsf{PE}_{\mathsf{sp}} \, ^* \, \mathsf{EF}_{\mathsf{sp}}) + (\mathsf{PE}_{\mathsf{usp}} \, ^* \, \mathsf{EF}_{\mathsf{usp}}) - \sum (\mathsf{SE}_{\mathsf{sp}} \, ^* \, \mathsf{EF}_{\mathsf{sp}})}_{\sum \mathsf{EG}_{\mathsf{asp}} + \sum \mathsf{PE}_{\mathsf{sp}} + \mathsf{PE}_{\mathsf{usp}} - \sum \mathsf{SE}_{\mathsf{sp}}}$$

 EF_{asp} = Emission Factor for asset- owning and asset-controlling suppliers in MTCO₂ per MWh

 ΣE_{asp} = the sum of CO₂ emissions from electricity generation for each specified electric generating facility/unit in the asset owning/controlling supplier's fleet, as reported to ARB under the Mandatory Reporting Regulation (MTCO₂)

 $\sum EG_{asp}$ = the sum of net generation for each specified electric generating facility/unit in the asset owning/controlling supplier's fleet for the report year as reported to ARB under the Mandatory Reporting Regulation(MWh)

 Σ PE _{sp} = Sum of electricity purchased from specified sources by the asset-owning or asset-controlling 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-owning or 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-owning or asset-controlling supplier for the year as reported to ARB under the Mandatory Reporting Regulation (MWh)

 $\mathsf{EF}_{\mathsf{sp}} = \mathsf{CO}_2$ emission factor as defined for generating units and facilities.

 $\mathsf{EF}_{\mathsf{usp}} = \mathsf{CO}_2$ default emission factor for unspecified sources.

(h) Fee Liability for Fuels.

The Executive Officer shall calculate the Fee Liability for each entity reporting pursuant to section 95204(d)(1-3), (e) and (f) 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 Liability for each entity

 $QF_i = Quantity of fuel$

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

(i) Fee Liability for Imported Electricity.

The Executive Officer shall calculate the fee liability for each entity reporting pursuant to section 95204(g) based on the quantity of electricity imported, as follows:

$$FS_i = (EFR_i \times QM_i)$$

Where:

FS_i = The Fee Liability for each entity

QM_i = Quantity of MWh of imported electricity from each specified source, asset-owning or asset-controlling supplier, or unspecified source, as appropriate

EFRi = Electricity fee rate for each specified source, asset-owning or asset-controlling supplier, or unspecified source, as appropriate

(j) Fee Liability for Entities.

For entities reporting pursuant to section 95204(d)(4), (h) and (i), 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 Entity

CCC = Common Carbon Cost

 QE_1 = the total amount of process emissions associated with the entity.

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 article must be submitted to ARB by using the California Air Resources Board's Greenhouse Gas Reporting Tool, as specified in title17, California Code of Regulations section 95104(e), and is available on ARB's internet website at www.arb.ca.gov.

- (b) All entities subject to this article must report the following:
 - (1) Report Information:
 - (A) Report Year
 - (B) Facility Information
 - (i) Facility name
 - (ii) Physical address
 - (iii) Mailing address
 - (iv) Description of facility geographic location
 - (2) Operator Information:
 - (A) Operator name
 - (B) Email address

- (C) Telephone number
- (3) Operator Statement of Truth, Accuracy and Completeness.
 Operator signature and date stating: This report has been prepared in accordance with subchapter 105, article 1, sections 95100 to 95133, title 17, California Code of Regulations. The statements and information contained in this emissions data report are true, accurate and complete.
- (c) Timeline for Reporting.
 - (1) Reports for the 2008 calendar year must be submitted to ARB by January 2, 2010, or by the operative date of this article, whichever is later.
 - (2) Reports for the 2009 and subsequent calendar years must be submitted to ARB by June 30 of each year. For those entities subject to ARB's Mandatory Reporting Regulation, changes made to reported data as a result of the verification process must be concluded by December 1 of each year.
- (d) Natural Gas Utilities, Users and Pipeline Owners and Operators.
 - (1) All public utility gas corporations operating in California must annually report the aggregate quantity of therms of natural gas delivered at the meter to end users.
 - (2) All owners or operators of interstate and intrastate pipelines that distribute natural gas directly to end users must annually report the aggregate quantity of therms of natural gas directly distributed, at the metered to the end users.
 - (3) All California owners or operators that consume natural gas produced on-site and are subject to the Mandatory Reporting Regulation must report the quantity of therms of natural gas consumed annually of natural gas produced on-site in addition to all information required under the Mandatory Reporting Regulation.
 - (4) All California owners or operators that consume associated gas produced on-site and that are subject to the 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.
 - (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. Producers and importers of CARBOB must report each volume of CARBOB and the associated designated volume/volumes of oxygenate.

(f) Coal Combustion.

All entities that are subject to the Mandatory Reporting Regulation and combust coal must report the number of tons and the grade of coal combusted for each calendar year.

- (g) Retail Providers and Marketers of Imported Electricity.
 - (1) Retail Providers of Electricity. This information shall be the same information that is required to be submitted under the Mandatory Reporting Regulation, and include the total quantity of MWh of electricity imported from specified sources and unspecified sources with final point of delivery in California, and shall be reported on the schedule specified in the Mandatory Reporting Regulation.
 - (2) Marketers. All marketers of imported electricity must report all information required under the Mandatory Reporting Regulation, be consistent with section 95111 of the Mandatory Reporting Regulation, and include the total quantity of MWh of electricity imported from specified sources and unspecified sources with final point of delivery in California.

(h) Refinery Process Emissions.

Each refinery that produces process emissions must report all information required under the Mandatory Reporting Regulation, including individual quantities of those emissions. Each refinery must report the individual quantities of catalyst coke, petroleum coke, and refinery gas produced annually less the quantities exported out of the state. This information shall be derived from the information reported pursuant to the California Energy Commission's Petroleum Industry Information Reporting Act (PIIRA) codified in Public Resources Code sections 25350 et seq., and the Mandatory Reporting Regulation.

(i) Cement Manufacturers.

All cement manufacturers must report all information required under the Mandatory Reporting Regulation, including the total amount of process emissions resulting from their operations, as defined in this article. This information shall be the same information as that required to be submitted under the Mandatory Reporting Regulation.

(i) Records Retention.

Entities subject to this article must maintain copies of the information reported pursuant to this article 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.

95205. Payment and Collection.

- (a) For 2010, the Executive Officer shall provide a written fee determination notice to each affected entity of the amount due by February 1, or 30 days after the operative date of this article, whichever is later.
- (b) Beginning in 2011, no later than 30 days after the end of each calendar year, the Executive Officer shall provide a written fee determination notice to each affected entity of the amount due for the current calendar year. The amount of the fee shall be based on the reports submitted pursuant to section 95204 and the fee calculation formulas set forth in section 95203.
- (c) Payment Period. Each entity that is notified by the Executive Officer that it must remit a specified dollar amount to ARB for the current fiscal year shall transmit that dollar amount to ARB for deposit into the Air Pollution Control Fund within 60 days of receipt of the fee determination notice.
- (d) Late Fees. The Executive Officer shall assess an additional fee on entities failing to pay the fee within 60 days of receipt of the fee determination notice. The Executive Officer shall set the late fee in an amount sufficient to pay ARB's additional expenses incurred by the entity's untimely payment. The late fee is in addition to any penalty that may be assessed as provided in section 95206.

(e) Expenditure of Fees. The fees collected from the entities are to be expended by ARB only for the purposes of recovering the costs of carrying out the provisions of AB 32 and repaying the Debt.

NOTE: Authority: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505 and 39300, Health and Safety Code.

95206. Enforcement.

- (a) *Penalties*. Penalties may be assessed for any violation of this article pursuant to Health and Safety Code section 38580. Each day during any portion of which a violation occurs is a separate offense.
- (b) *Injunctions*. Any violation of this article may be enjoined pursuant to Health and Safety Code section 41513.
- (c) Violations. Each day or portion thereof that any report required by this article remains unsubmitted, is submitted late, or contains incomplete or inaccurate information, shall constitute a single, separate violation of this article. For the purposes of this section, "report" means any information required to be submitted by section 95204.
- (d) Payment Violations. The failure to pay the full amount of any fee required by this article shall constitute a single, separate violation of this article for each day or portion thereof that the fee has not been paid after the date the fee is due.
- (e) Auditing. The Executive Officer may contract with outside entities, including, but not limited to, the Board of Equalization, to obtain data or services needed to audit the returns provided by fee payers. The Executive Officer may use fee revenues collected under this article to fund auditing and collection procedures.
- (f) Authorization to Enforce. Enforcement of this article may be carried out by authorized representatives of ARB, including authorized representatives of air pollution control or air quality management districts.

NOTE: Authority: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505, 39300 and 41513, Health and Safety Code.

95207. Severability.

(a) Each part of this article is deemed severable, and, in the event that any part of this article is held to be invalid, the remainder of this article shall continue in full force and effect.

NOTE: Authority: Sections 38510, 38597, 39600 and 39601, Health and Safety Code. Reference: Sections 38501, 38505 and 39300, Health and Safety Code.

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Proposed Regulation Order

PROPOSED AMENDMENTS TO THE REGULATION FOR THE MANDATORY REPORTING OF GREENHOUSE GAS EMISSIONS

Amend section 95104, title 17, California Code of Regulations to read as follows:

(Note: The proposed amendments to the existing regulation are shown in <u>underline</u> to indicate proposed additions)

95104. Greenhouse Gas Emissions Data Report.

(No modifications are proposed to subsections (a) through (d) of section 95104.)

(e) The operator shall submit emissions data reports, and any revisions to the reports, through the California Air Resources Board's Greenhouse Gas Reporting Tool.

NOTE: Authority cited: Sections 38510, 38530, 39600, 39601, and 41511, Health and Safety Code. Reference: Sections 38530, 39600, and 41511, Health and Safety Code.

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