

Attachment B
STAFF'S SUGGESTED MODIFICATIONS TO THE ORIGINAL PROPOSAL

PROPOSED AMENDMENTS TO THE
AB 32 COST OF IMPLEMENTATION FEE REGULATION

October 20, 2011

This attachment shows the modifications to the originally proposed regulatory language. The originally proposed regulatory language is shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. The modifications made to this language are shown in double underline to indicate additions and ~~double-strikeout~~ to indicate deletions. Shown below are only those portions of the originally proposed language that have been modified.

AB 32 Cost of Implementation Fee Regulation

Amend section 95201(a)(1)(D) and section 95201(a)(4)(B), title 17, California Code of Regulations to read as follows:

§ 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 ~~distribute~~ deliver or use natural gas in California.

(D) All owners or operators of ~~interstate~~ intrastate pipelines that are not included in subsection 95201(a)(1)(A), that ~~distribute~~ deliver natural gas directly to end users. Fees shall be paid for each therm of ~~natural~~ natural gas ~~distributed~~ delivered directly to end users, except for natural gas delivered to electricity generating facilities.

(4) *First Deliverers of Electricity.*

(B) For electricity delivered in California on or after January 1, 2011, 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 is the purchasing-selling entity 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 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 California diesel). 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. No fee shall be paid for any megawatt-hour of electricity that is not required to be reported pursuant to the Mandatory Reporting Regulation.

2. No fee shall be paid for any megawatt-hour of renewable energy, nor for ~~replacement~~ electricity for variable renewable resources that meets the requirements for a zero emission factor pursuant to MRR section 95111 ~~except that, for replacement electricity that has an emission factor greater than the default emission factor, the fee shall be paid based on the difference between the greater emission factor and the default emission factor.~~

Amend section 95202(a), title 17, California Code of Regulations, to read as follows:

[Note: Section 95202(a) contains many definitions. Shown below are only those definitions where modifications have been made to the originally proposed language.]

§ 95202. Definitions.

(a) For the purposes of this subarticle, the following definitions shall apply:

(18) “California balancing authority” means a balancing authority with control over a balancing authority area primarily located in the State of California. A California balancing authority is responsible for the operation of the transmission grid within its metered boundaries which may extend beyond the geographical boundaries of the State of California.

(~~18~~ ~~22~~ 23) “Carbon dioxide equivalent” or “CO₂ equivalent” or “CO₂e” “CO₂E” or “CO₂ equivalent” means the number of metric tons of CO₂ emissions with the same global warming potential as one metric ton of another greenhouse gas. For the purposes of this subarticle, global warming potential values listed in Table A-1 of 40 CFR Part 98 are used to determine the CO₂ equivalent of emissions, 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).

~~(30-31)~~ (39) “Cogeneration” means an integrated system that produces electric energy and useful thermal energy for industrial, commercial, or heating and cooling purposes, through the sequential or simultaneous use of the original fuel energy. Cogeneration must involve ~~onsite~~ generation of electricity and useful thermal energy and some form of waste heat recovery. Some examples of cogeneration include: (A) a gas turbine or reciprocating engine generating electricity by combusting fuel and then uses a heat recovery unit to capture useful heat from the exhaust stream of the turbine or engine; (B) steam turbines generating electricity as a byproduct of steam generation through a fired boiler; (C) Cogeneration systems in which the fuel input is first applied to a thermal process such as a furnace and at least some of the heat rejected from the process is then used for power production. For the purposes of this subarticle, a combined-cycle power generation unit, where all of the generated steam is used for electricity generation, is not considered a cogeneration unit.

(39) “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.”

(42) “Direct delivery of electricity” or “directly delivered” means electricity that meets any of the following criteria:

(A) The facility has a first point of interconnection with a California balancing authority;

(B) The facility has a first point of interconnection with distribution facilities used to serve end users within a California balancing authority area;

(C) The electricity is scheduled for delivery from the specified source into a California balancing authority via a continuous transmission path from interconnection of the facility in the balancing authority in which the facility is located to a final point of delivery located in the state of California; or

(D) There is an agreement to dynamically transfer electricity from the facility to a California balancing authority.

~~(35 46 49)~~ (49) “Electricity importers” are marketers and retail providers that deliver ~~hold title to~~ imported electricity. For electricity delivered between balancing authority areas, the electricity importer entity that holds title to delivered electricity 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, 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). ~~When PSEs are not subject to the regulatory authority of ARB, including tribal nations, the electricity importer is the immediate downstream purchaser or recipient that is subject to the regulatory authority of ARB.~~ means an owner of electricity generated outside of California as it is delivered to the first point of delivery in California, for electricity having a final point of delivery in California.

~~(64-67)~~ "Generated electricity" means electricity generated by an electricity generating unit at the reporting facility. Generated electricity does not include any electricity wheeled through the facility, i.e., electricity that is generated outside the facility and delivered into the facility with final destination outside of the facility.

~~(56-72)~~ 75 "Imported electricity" means electricity that is generated outside the State of California and delivered to a first point of delivery into 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 ~~over a~~ 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 ~~which is electricity that is delivered into California with final point of delivery outside California.~~ 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 the CAISO balancing authority area, but outside the State of California, with a final point of delivery in California. Imported electricity does not include:

(A) — Power wheeled through California, which is power that is imported into California that terminates in a location outside of California; or

(B) ~~Power transactions in which imported power is simultaneously exchanged for exported power.~~

~~(62 84 84)~~ “Marketer” means a purchasing ~~–/~~selling entity that delivers electricity takes title to wholesale electricity and 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.

~~(86 109 112)~~ “Purchasing ~~or~~ selling entity” or “PSE” means for purposes of this regulation an the functional entity that is eligible to purchases or sells, and takes title to energy, or capacity, and reserve transmission reliability related services. A PSE is identified on a NERC E-tag for each physical path segment.

~~(110-113)~~ “Qualified exports” means emissions associated with electricity that is exported in the same hour as imported electricity and documented by NERC E-tags. When imports are not documented on NERC E-tags, because a facility or unit located outside the State of California has a first point of interconnection with a California balancing authority area, the reporting entity may demonstrate hourly electric delivery consistent with the record keeping requirements of the California balancing authority area, including records of revenue quality meter data, invoices, or settlements data. Only electricity exported within the same hour and by the same PSE importer as the imported electricity is a qualified export. It is not necessary for the imported and exported electricity to enter or leave California at the same intertie. Emissions associated with qualified exports may be subtracted from the associated imports. Qualified exports shall not result in a negative compliance obligation for any hour.

~~(115)~~ “Replacement electricity” means electricity delivered to a first point of delivery in California to replace electricity from variable renewable resources in order to meet hourly load requirements. The electricity generated by the variable renewable energy facility and purchased by the first deliverer is not required to meet direct delivery requirements. The physical location of the variable renewable energy facility busbar and the first point of receipt on the NERC E tag for the replacement electricity must be located in the same balancing authority area.

~~(94 123 124)~~ “Specified source of electricity” or “specified source of power” means a particular generating facility or unit or which is permitted to be claimed as the source of imported electricity delivered by an electricity importer. The reporting entity electricity importer must have either full or partial ownership in the facility/unit or a written contract to procure electricity generated by that facility/unit. Specified facilities/units include cogeneration systems. Specified source also means electricity procured

~~from an asset-controlling supplier recognized by the ARB. electricity generating facility in California or out of state to which electrical generation can be confidently tracked due to full or partial ownership by a first deliverer, or due to its identification in a power contract with a first deliverer, and also means an asset-owning or asset-controlling supplier.~~

~~(99 ~~130~~ 131) “Unspecified source of electricity power” or “unspecified source” means a source of electricity procured and delivered without limitation at the time of transaction to a specific facility’s or unit’s generation. generation that cannot be matched to a particular specific facility or unit that generates electricity or matched generating unit or facility, or to an asset-owning or asset-controlling supplier. recognized by the ARB. Unspecified sources contribute to the bulk system power pool and typically are dispatchable, marginal resources that do not serve baseload.~~

Amend section 95203(b) and section 95203(m), title 17, California Code of Regulations to read as follows:

(b) *Common Carbon Cost.*

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

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

Where

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

$(Q_c \times EF_c)$ = Statewide quantity of emissions from coal, or petroleum coke (Fee Regulation only), except that used in an electricity generating facility, calculated as the sum of:

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

$(Q_l \times EF_l)$ = Quantity of lignite coal (Q_l) x the emission factor (EF_l) for lignite coal;

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

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

$(Q_{pc} \times EF_{pc})$ = Quantity of petroleum coke (Fee Regulation only) (Q_{pc}) x the emission factor (EF_{pc}) for petroleum coke (Fee Regulation only)

- Q_{cc} = Statewide quantity of emissions from catalyst coke (Fee Regulation only), except that used in an electricity generating facility
- Q_{rga} = Statewide adjusted quantity of emissions from refinery fuel gas, except that used in an electricity generating facility
- Q_{ng} = Statewide quantity, in therms, of natural gas supplied for all uses except electricity generating facilities during the reporting period
- EF_{ng} = Emission factor of $MTCO_2$ for natural gas
- Q_{ag} = Statewide quantity of emissions from associated gas (Fee Regulation only)
- 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 $MTCO_2$ for each supplied gallon of California gasoline-
- Q_d = Quantity of California diesel fuel supplied during the reporting period
- EF_d = Emission factor of $MTCO_2$ for each supplied gallon of California diesel fuel
- $(Q_{ie} \times EF_{ie})$ = Quantity of emissions from ~~delivered~~ electricity delivered in California as the sum of:

$(Q_{sp} \times EF_{sp})$ = Quantity of MWh of electricity delivered from each specified source multiplied by the emission factor for that specified source;

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

Minus

$(Q_{ge} \times EF_{ge})$ = Quantity of MWh of qualified exports from each specified source multiplied by the emission factor for that specified source.

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

(j m) *Fee Liability for ~~Delivered~~ Electricity Delivered in California.*

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

$$FS_i = \sum(EFR_d \times QM_d) - \sum(EFR_{ge} \times QM_{ge}) - (CCC \times QM_{RPS})$$

Where:

FS_i = Fee for each entity

QM_d = Quantity of MWh of ~~delivered~~ electricity delivered in California from each specified source, ~~asset-owning or~~ asset-controlling supplier, or unspecified source, as appropriate

EFR_d = Electricity fee rate for electricity from each specified source, ~~asset-owning or~~ asset-controlling supplier, or unspecified source, as appropriate

$\sum(EFR_{ge} \times QM_{ge})$ = Sum of products for each hour in which the entity exports electricity

EFR_{ge} = Electricity fee rate for electricity from qualified exports ~~from each source~~ using the lowest emission factor of any portion of the qualified exports or corresponding imports for the hour

QM_{ge} = Quantity of MWh from qualified exports ~~from each source~~ as the lower of either the quantity of exports or imports for the hour

CCC = Common Carbon Cost

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.

Amend section 95204(c)(3) and section 95204(d)(1), title 17, California Code of Regulations to read as follows:

§ 95204. Reporting and Recordkeeping Requirements.

(c) *Timeline for Reporting.*

(3) Each electricity importer required to report under this subarticle must submit a report for the 2011 and subsequent reporting years to ARB no later than June 1 of the following year, each year. Each facility owner or operator and fuel supplier required to report under this subarticle must submit a report for the 2011 and subsequent reporting years to ARB no later than April 10 of the following year and each year thereafter.

(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, and including the aggregate quantity of therms of ~~excluding~~ natural gas delivered to electricity generating facilities.

(2) All owners or operators of intrastate pipelines that ~~distributed~~ deliver natural gas directly to end users must annually report the aggregate quantity of therms of natural gas directly ~~distributed~~ delivered, at the meter to all end users, and including the aggregate quantity of therms of ~~excluding~~ natural gas delivered to electricity generating facilities.