

ATTACHMENT 1

PROPOSED 15-DAY MODIFICATIONS

Subchapter 10. Climate Change

Article 4. Regulations to Achieve Greenhouse Gas Emission Reductions

Subarticle 3.1. Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

*[Note: Shown below are proposed modifications to the originally proposed regulatory text set forth in Appendix A to the Staff Report: Initial Statement of Reasons, released January 7, 2010. Only those portions containing the modifications are included. This document is printed in a style to indicate changes from the originally proposed regulatory language. Modifications to the original proposal are shown in underline to indicate additions and ~~strikeout~~ to indicate deletions. The symbol "*****" means that the remainder of the text of the regulation for a specific section is not shown, but has been incorporated by reference, unchanged.]*

Amend proposed sections 95351, 95353, 95354, 95355, and 95356, title 17, California Code of Regulations to read as follows.

§ 95351. Definitions.

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

- (1) **“Active GIS Equipment”** means non-hermetically sealed SF₆ gas insulated switchgear that is:
 - (A) actively eConnected (i.e., interconnected through busbars or cables ~~which are actively conducting electricity~~) to the GIS owner’s electrical power system; or
 - (B) Fully-charged, ready for service, located at the site in which it will be activated, and employs a mechanism to monitor SF₆ emissions.

“Active GIS equipment” does not include equipment in storage.

- ~~(2)~~(3) **“Emergency Event”** means a situation arising from a sudden and unforeseen ~~natural disaster~~ event such as including, but not limited to, an earthquake, flood, or fire.

- ~~(3)~~(4) **“Emission rate”** means, subject to the provisions of section 95356(e), a GIS owner’s total annual SF₆ emissions from all active GIS equipment divided by the ~~total~~ average annual SF₆ nameplate capacity of all active GIS equipment.
- ~~(4)~~(5) **“Executive Officer”** means the Executive Officer of the California Air Resources Board (ARB) or his or her designee.
- ~~(5)~~(6) **“Gas container”** means a vessel containing or designed to contain SF₆. “Gas container” includes pressurized cylinders, gas carts, or other containers.
- ~~(6)~~(7) **“Gas insulated switchgear or GIS”** means all electrical power equipment insulated with SF₆ gas regardless of location. Gas insulated switchgear or GIS includes switches, stand-alone gas-insulated equipment, and any combination of electrical disconnects, fuses, electrical transmission lines, transformers and/or circuit breakers used to isolate gas insulated electrical equipment.
- ~~(7)~~(8) **“GIS Owner”** means the person who owns gas insulated switchgear. For purposes of this regulation “GIS owner” excludes temporary ownership by the original equipment manufacturer during GIS equipment transport and installation at a customer’s site.
- ~~(8)~~(9) **“Hermetically Sealed Gas Insulated Switchgear”** for purposes of this regulation, means switchgear ~~which~~ that is designed to be gas-tight and sealed for life. This type of switchgear is pre-charged with SF₆, sealed at the factory, and is not refillable by its user.
- ~~(9)~~(10) **“Nameplate Capacity”** means the design capacity of SF₆ specified by the manufacturer for optimal performance of a GIS device. Nameplate capacity may be found on the nameplate attached to the GIS device, or may be stated within the manufacturer’s official product specifications.
- ~~(10)~~(11) **“NIST-Traceable Standards”** means national, traceable measurement standards developed by the National Institute of Standards and Technology (NIST).
- ~~(11)~~(12) **“Person”** shall have the same meaning as defined in Health and Safety Code section 39047.
- ~~(12)~~(13) **“Responsible Official”** means one of the following:

NOTE: Authority cited: Sections 38510, 38560, 38580, 39600, and 39601, Health and Safety Code.
Reference: Sections 38560, 39600, and 39601, Health and Safety Code.

§ 95353. Emergency Event Exemption.

- (a) ~~After January 1, 2020,~~ a A GIS owner may request emissions from an emergency event to be exempted from the calculation of the maximum allowable emission rate if it is demonstrated to the Executive Officer's satisfaction that the release of SF₆:

NOTE: Authority cited: Sections 38510, 38560, 38580, 39600, and 39601, Health and Safety Code.
Reference: Sections 38560, 39600, and 39601, Health and Safety Code.

§ 95354. SF₆ Inventory Measurement Procedures.

- (a) Beginning January 1, 2011, GIS owners must do all of the following:
- (1) Establish and adhere to written procedures to track ~~and weigh~~ all gas containers as they are leaving and entering storage;
 - (2) Weigh all gas containers on a scale that is certified by the manufacturer to be accurate to within one percent of the true weight;

- (b) Beginning January 1, 2011, GIS owners must:

NOTE: Authority cited: Sections 38510, 38560, 38580, 39600, and 39601, Health and Safety Code.
Reference: Sections 38560, 39600, and 39601, Health and Safety Code.

§ 95355. Recordkeeping.

Beginning January 1, 2011, GIS ~~O~~wners of gas insulated switchgear must:

- (a) Establish and maintain a current and complete GIS equipment inventory which includes the following information for each piece of equipment:

- (8) A chronological record of the dates on which SF₆ was transferred into or out of active GIS equipment;
- (9) The amount, in pounds, of SF₆ transferred into or out of the active GIS equipment;

~~(8)~~(10) Equipment status (active or inactive); and

~~(9)(11)~~ Equipment location:

- (b) Establish and maintain a current and complete inventory of gas containers, which includes the following information for each container:

- (4) ~~A chronological accounting, by~~ The weight, in pounds, of SF₆ transferred into or out of the in each container; at the end of each calendar year, and when gas containers are added or removed from inventory.
- (5) ~~The current SF₆ residual, by weight in pounds.~~

NOTE: Authority cited: Sections 38510, 38560, 38580, 39600, and 39601, Health and Safety Code.
Reference: Sections 38560, 39600, and 39601, Health and Safety Code.

§ 95356. Annual Reporting Requirements.

- (a) Beginning in calendar year ~~2014~~ 2012 for emissions occurring during the previous calendar year, and each calendar year thereafter, each GIS owner must submit the following annual report to the Executive Officer no later than the applicable deadline specified in title 17, California Code of Regulations, Section 95100, et seq.

- (b) The annual report must contain all of the following information:

- (8) A gas insulated switchgear inventory report containing the information required by Section 95355, subsections (a)(1) through (a)~~(8)~~(11); and
- (9) A gas container inventory report containing the information required by Section 95355~~(b)~~, subsections (b)(1) through (b)(4).

- (c) The annual report shall be submitted to the Executive Officer as follows:

- (1) GIS owners subject to the requirements of title 17, California Code of Regulations, Sections 95100 et seq., shall use the ARB Greenhouse Gas Reporting Tool or other mechanism, as specified in title 17, California Code of Regulations, section 95104(e).

- (2) GIS owners not subject to the requirements of title 17, California Code of Regulations, ~~§~~sections 95100 *et seq.*, may either:
- (A) Use the ARB's Greenhouse Gas Reporting tool, or other mechanism, as specified in title 17, California Code of Regulations, section 95104~~(e)~~; or

- (d) *Annual SF₆ Emissions.* GIS owners must use the following equation to determine their SF₆ emissions:

Equation for determining annual SF₆ emissions:

User Emissions = (Decrease in SF₆ inventory) + (Acquisitions of SF₆) – (Disbursements of SF₆) – (Net increase in total nameplate capacity of ~~non-hermetically sealed~~ active GIS equipment owned).

Where:

Decrease in SF₆ inventory = (SF₆ stored in containers, but not in equipment, at the beginning of the year) - (SF₆ stored in containers, but not in equipment, at the end of the year).

Acquisitions of SF₆ = (SF₆ purchased in bulk from chemical producers, ~~or distributors in bulk, or other entities~~) + (SF₆ purchased from equipment manufacturers, ~~or distributors, or other entities~~ with or inside ~~non-hermetically sealed~~ active GIS equipment) + (SF₆ returned to site after off-site recycling).

Disbursements of SF₆ = (SF₆ in bulk and contained in ~~non-hermetically sealed~~ active GIS equipment that is sold to other entities) + (SF₆ returned to suppliers) + (SF₆ sent off site for recycling) + (SF₆ sent to destruction facilities).

Net increase in total nameplate capacity of ~~non-hermetically sealed~~ active GIS equipment ~~operated~~ owned = (The nameplate capacity of new ~~non-hermetically sealed~~ active GIS equipment) - (Nameplate capacity of retiring ~~non-hermetically sealed~~ active GIS equipment).

~~(Note that nameplate capacity refers to the manufacturer's SF₆ design capacity rather than to the actual charge, which may reflect leakage.)~~

NOTE: Authority cited: Sections 38510, 38560, 38580, 39600, and 39601, Health and Safety Code.
Reference: Sections 38560, 39600, and 39601, Health and Safety Code.