

**BEFORE THE  
AIR RESOURCES BOARD  
OF THE  
STATE OF CALIFORNIA**

**SOUTHERN CALIFORNIA PUBLIC POWER AUTHORITY  
COMMENT ON PROPOSED REGULATION ORDER:  
REGULATION FOR REDUCING SULFUR HEXAFLUORIDE EMISSIONS  
FROM GAS INSULATED SWITCHGEAR**

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The Southern California Public Power Authority (“SCPPA”)<sup>1</sup> respectfully submits this comment on the Proposed Regulation Order: Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (“Proposed SF6 Regulation”).

SCPPA supports the state’s efforts to reduce emissions of greenhouse gases in California, including minimizing the leakage of SF6 from gas-insulated switchgear. However, it is important that the Proposed SF6 Regulation accomplishes this goal without being overly restrictive, without imposing undue administrative and recordkeeping burdens on the state’s power system operators, and without setting annual emissions limits that power system operators are unable to meet in the event of emergency situations or other extraordinary circumstances.

SCPPA’s comments follow the order of the sections in the Proposed SF6 Regulation rather than being presented in order of importance. SCPPA has also included suggested markups to the language of the Proposed SF6 Regulation along with each comment.

**I. SUMMARY OF KEY POINTS**

SCPPA’s key points are as follows:

- The definition of “Active GIS Equipment” should include in-service but de-energized Gas Insulated Switchgear (“GIS”) and fully-charged spare GIS equipment. Such equipment is ready for service and is maintained in the same state as in-service

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<sup>1</sup> SCPPA is a joint powers authority. The members are Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles Department of Water and Power, Imperial Irrigation District, Pasadena, Riverside, and Vernon.

energized GIS equipment, and any SF6 used to recharge this equipment comes out of the same gas inventory that is used for in-service equipment.

- “Emergency Events” should not be restricted to natural disasters but should include other unforeseen or uncontrollable events, similar to the definitions of Emergency Event (or equivalent) in other Air Resources Board (“ARB”) regulations.
- The emergency event exemption should be effective from the start of the regulation in 2011 rather than delayed until 2020, as emergency events may occur at any time and may have a significant effect on a utility’s annual emissions rate. This is especially critical for small utilities for which an uncontrollable event can mean the difference between compliance and non-compliance with the annual limit.
- To encourage early reductions in SF6 emissions and to provide an alternative means to comply with the annual SF6 emission rate limits, an entity with an emissions rate below the maximum allowed rate in one year should be able to carry over those excess reductions as credits that can be used to comply with the maximum annual emission rate in future years.
- Gas containers only need to be weighed once a year in order to calculate annual SF6 emissions using the mass balance calculation method used by the United States Environmental Protection Agency (“US EPA”) and specified in the Proposed SF6 Regulation for calculating annual SF6 emissions. The proposed requirement to weigh every gas container each time gas is transferred into or out of the container is excessive, unnecessarily increases the recordkeeping burden on utility personnel, and increases the potential for work related injuries due to the fact that large gas containers weigh over 200 pounds when full.

- As records may be stored electronically and kept at a central location, ARB should allow sufficient time for utilities to gather and prepare their SF6 records for inspection.
- The calibration requirements and start of data collection for the first annual report under the Proposed SF6 Regulation should be delayed until January 1, 2011 instead of being retroactive to January 1, 2010.
- In some cases, GIS equipment is operated and maintained by an entity that is not the owner of the equipment. To accommodate these arrangements, certain changes need to be made to the equation for calculating annual emissions in order to attribute emissions to the correct entities.
- The proposed requirement to calculate average system nameplate capacity each year would be data-intensive and time-consuming, and prone to errors given the large number of calculations involved. A simpler approach should be used, consistent with subpart DD of the US EPA's draft Mandatory Reporting Rule, of reporting the total nameplate capacity of SF6 equipment at the beginning of the year along with the nameplate capacity of new equipment purchased and equipment retired during the year. This approach tracks changes in nameplate capacity in a more manageable way and will be less prone to calculation errors.
- Emissions from jointly-owned GIS equipment and the nameplate value of that equipment should be allocated to the GIS owners based on ownership share.
- Reporting entities should have an opportunity to correct unintentional errors or deficiencies in their annual reports prior to the imposition of daily penalties for incomplete or inaccurate reports.

- Compliance with the Proposed SF6 Regulation is based on an annual average emission limit. Therefore, exceeding the annual SF6 emission rate should be considered to be a single violation rather than 365 separate daily violations.

## II. SECTION 95351, DEFINITIONS

### A. **“Active GIS Equipment” should include in-service GIS equipment that is de-energized and fully charged spare equipment.**

In-service GIS equipment that is connected to the electrical power system but not actively conducting electricity (de-energized) and spare equipment that is kept fully-charged with SF6 and ready to be placed into service (“Charged Spares”) should be considered to be “Active GIS Equipment” for the purposes of calculating the annual SF6 emission rate. The emissions rate, in summary, is calculated as follows:

$$\text{Annual SF6 emission rate} = \frac{\text{Annual SF6 Emissions}}{\text{Average Nameplate Capacity of Active GIS Equipment}}$$

GIS equipment may be connected to the electrical power system but be de-energized for a period of time, depending on the operational needs of the system. In addition, in the interest of maintaining reliability of the system, a utility may keep a Charged Spare at an electrical station to expedite replacement if a piece of in-service equipment fails. Both de-energized equipment and Charged Spares are maintained fully charged, and SF6 gas from the utility’s inventory may be used to refill Charged Spares as well as in-service equipment.

However, the proposed definition of “Active GIS Equipment” excludes GIS equipment that is not actively conducting electricity. Therefore, both de-energized equipment and Charged Spares would be excluded from the average nameplate capacity (denominator of the annual emission rate), even though gas used to refill this equipment is included in the annual SF6 emissions (numerator of the annual emission rate). If SF6 gas used to refill GIS equipment is

included in the numerator of the emissions rate equation, the nameplate capacity of that equipment should be included in the denominator of the emissions rate equation.

To address this inconsistency, SCPPA suggests the following changes to section 95351(a)(1) of the Proposed SF6 Regulation:

“Active GIS Equipment” means in-service non-hermetically sealed SF6 gas insulated switchgear that is actively connected (~~i.e., interconnected~~ through busbars or cables ~~which are actively conducting electricity~~) to the GIS owner’s electrical power system, or that is kept fully-charged and ready for service. “Active GIS equipment” does not include equipment in storage.

The defined term Active GIS Equipment should also be used in the relevant equations in section 95356 – see below for SCPPA’s comments on that section.

**B. The definition of “Emergency Event” should be broader.**

“Emergency Event” is too narrowly defined and does not adequately address the kinds of emergency events that GIS operators are likely to encounter that could result in an unpreventable release of SF6. This definition should be expanded to be consistent with the definitions for emergency events used in other ARB regulations, which are broader and include other situations beyond the owner’s or operator’s control, not just natural disasters. For example:

1. ARB’s Refrigerant Management Program Regulation includes an exemption in section 95397(a)(3) for:

“a natural disaster such as an earthquake or flood, an act of war or an act by a public enemy, or a civil disorder or riot.”

2. Section 93115(d) of the ARB’s Airborne Toxic Control Measure (“ATCM”) for Stationary Compression Ignition Engines allows “Emergency Use” of the engines when there is a loss of power:

“1. which is caused by any reason other than the enforcement of a contractual obligation the owner or operator has with a third party or any other party; and

2. which is demonstrated by the owner or operator to the district APCO's satisfaction to have been beyond the reasonable control of the owner or operator."

3. Section 93118.3(c)(14) of the ARB's ATCM for Auxiliary Diesel Engines

Operated on Ocean-Going Vessels At-Berth in a California Port broadly defines

"Emergency Event" to include the following:

"(A) Any situation arising from a sudden and reasonably unforeseeable event beyond the control of the master that threatens the safety of the vessel; or

(B) The utility serving the port cannot provide electrical power to the port as a result of equipment failure, a transmission emergency, distribution emergency, a California Independent System Operator (CAISO) or Los Angeles Department of Water and Power (LADWP) Stage 3 emergency, or the utility needs to reduce power to the port because of a sudden and reasonably unforeseeable natural disaster, such as, but not limited to, an earthquake, flood, or fire; or

(C) When the utility providing electrical power to the port notifies the terminal operator(s) to reduce the use of grid-based electrical power in response to a transmission or distribution emergency, a CAISO or LADWP Stage 3 emergency, or to avoid a Stage 3 emergency if one is anticipated. The emergency event ends when CAISO or LADWP cancels the Stage 3 emergency or the utility notifies the terminal operator(s) that reduction in the use of grid-based electrical power is no longer necessary. The port may contact the terminal operator(s) on behalf of the utility if such an agreement exists between the utility and the port; or

(D) The electrical system at the terminal cannot provide electrical power as a result of equipment failure."

One of the key limitations in an "emergency event" definition is the requirement that the event be beyond the control of the owner/operator. In the Proposed SF6 Regulation this is addressed separately in section 95353(a), which allows an emergency event exemption only if the release of SF6 from the Emergency Event:

"(1) Could not have been prevented by the exercise of prudence, diligence, and care; and



(2) Was beyond the control of the GIS owner.”

In light of these examples from other ARB regulations, and given the additional criteria for the emergency event exemption in section 95353(a) of the Proposed SF6 Regulation, SCPPA suggests the definition of “Emergency Event” in section 95351(a) be reworded to include emergency situations other than natural disasters, as follows:

(32) "Emergency Event" means a situation arising from a sudden and unforeseen event, or an event unpreventable by the GIS owner, such as a natural disaster, (such as an earthquake, flood, or fire), an act of war or an act by a public enemy, or a civil disorder or riot.

### **III. SECTION 95352, MAXIMUM ANNUAL SF6 EMISSION RATE**

Reducing emissions early is one of the objectives of AB32, which states that the regulations should be designed in a manner that “encourages early action to reduce greenhouse gas emissions.” Cal. H&S Code section 38562(b)(1). Therefore, the Proposed SF6 Regulation should recognize and encourage reductions in SF6 emissions below the maximum annual SF6 emission rate. It takes significant effort and investment in resources (both staff and capital) to reduce SF6 emissions. Being able to bank credit for early reductions would create an incentive to make this investment earlier than required.

Such a mechanism would also provide more flexibility for utilities to comply with the maximum annual emission rate requirements – an important consideration, as utilities’ SF6 emissions may fluctuate from year to year for various reasons, some of which may be beyond their control but outside the scope of the emergency event exemption.

Early reductions should be encouraged by allowing a utility whose SF6 emissions rate is lower than the maximum annual emission rate specified for the relevant year in section 95352 of the Proposed SF6 Regulation (“Excess Reduction”) to carry over the Excess Reduction to help the utility comply with the maximum emission rate in future years.

The ARB's Low Carbon Fuel Standard ("LCFS") provides a more elaborate example of this approach. The LCFS allows for compliance by means of "credits" for fuels with lower carbon intensity and allows trading of such credits.

If the ARB does not wish to modify the Proposed SF6 Regulation to provide that Excess Reductions are credits that can be traded between entities covered by the Proposed SF6 Regulation, the ARB should, at minimum, allow an entity to carry forward its own Excess Reductions.

In order to permit banking of Excess Reductions, SCPPA proposes that the following additional wording be inserted at the end of section 95352 of the Proposed SF6 Regulation:

If a GIS owner's SF6 emission rate in a particular year (Year A) is lower than the maximum allowable SF6 emission rate for that year (Year A Rate), the GIS owner can bank the excess reduction (equal to the difference between the Year A Rate and the GIS owner's actual SF6 emission rate for Year A) as a credit that can be used to comply with the SF6 emission rate in future years.

#### **IV. SECTION 95353, EMERGENCY EVENT EXEMPTION**

##### **A. The exemption should be available from the start of the regulation.**

Emergency Events can occur at any time, and may cause significant releases of SF6. More than one Emergency Event may occur in a year. Despite the fact that the total allowed emissions rates are higher in the beginning years of the program, if a catastrophic event occurs early on in the regulation period, the need for an emergency event exemption would be as dire and an exemption would be as justifiable as in the later years of the program. This is particularly true for small utilities with low SF6 nameplate capacity. A small utility's emissions rate could be drastically affected by a single emergency event.

The ability to apply for an exemption should take effect in the first year of compliance instead of being delayed until the last year of compliance as currently proposed.

Therefore, SCPPA suggests the following change to section 95353(a) of the Proposed SF6 Regulation:

(a) After January 1, ~~2011~~2020, 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: . . .

**B. Additional time is needed to apply for an exemption.**

If a major emergency event occurs, the focus will be on making repairs and returning service to customers, so it may not be possible to gather the required information and submit a request for exemption within the proposed 30 day window. In addition, if the operator of the GIS equipment is different from the GIS owner(s), time is needed for the operator to inform the owner, or owners if the GIS equipment is jointly owned, and time is needed for the owner(s) to prepare and submit a request for exemption. Accordingly, the period of time for submitting a request for exemption should be extended to at least 60 days.

Therefore, SCPPA suggests the following changes to section 95353(b) of the Proposed SF6 Regulation:

(b) A request for an exemption pursuant to this section must be submitted in writing to the Executive Officer within ~~30~~60 calendar days after the ~~discovery~~occurrence of the emergency event, and must contain the following information . . .

**V. SECTION 95354, SF6 INVENTORY MEASUREMENT PROCEDURES**

**A. Gas containers only need to be weighed annually.**

The Initial Statement of Reasons ("ISOR") for the Proposed SF6 Regulation states:

"The proposed regulation will expand on the recordkeeping and reporting requirements already required by the mandatory reporting regulations. The additional requirements are minimal and will have a limited impact on DWR and local agencies."

ISOR at 20. SCPPA does not agree with this assessment. Contrary to the ISOR, the Proposed SF6 Regulation includes reporting and recordkeeping requirements that are far more extensive than current industry practices.

As a prime example, the Proposed SF6 Regulation requires each gas container to be weighed before and after gas is transferred into or out of the container. When GIS equipment is serviced, gas may be transferred from the equipment into a processing unit, then into a gas cylinder. At the conclusion of servicing, the gas may be returned to the equipment via the same pathway. Having to weigh the processing unit and gas cylinder at each step of this process would be excessive and burdensome.

Currently, gas containers are weighed at the beginning and end of the year, in accordance with the US EPA's mass balance calculation method for its voluntary SF6 reporting program ("US EPA SF6 Program"). The same method is currently specified in the ARB's Mandatory Reporting Regulation. Weighing the gas containers at the beginning and end of the year would be sufficient to determine the annual usage of SF6 under those programs and would be sufficient for calculating annual SF6 emissions in section 95356(d) of the Proposed SF6 Regulation. Increasing the frequency of weighing the gas containers would increase the burden on staff. Worse yet, increasing the frequency would create a health and safety issue as the large gas cylinders weigh over 200 pounds when full. Additionally, increasing the frequency would increase costs. The ISOR opined:

"Staff assumed that per-utility recordkeeping and reporting costs for the first year would range between approximately \$500 and \$1,900. Annual recordkeeping and reporting costs for succeeding years would range between \$240 and \$960 per entity."

ISOR at ES-4. However, the costs are likely to be considerably higher than estimated in the ISOR if per-use weighing is part of the record-keeping process.

Given these issues, particularly the fact that per-use weighing is not required in order to comply with the central requirement of the Proposed SF6 Regulation, the maximum annual emissions rate, GIS owners (or, in practice, GIS operators) should only be required to weigh gas containers on an annual basis.

SCPPA suggests the following amendment to section 95354(a) of the Proposed SF6 Regulation:

(1) Establish and adhere to written procedures to track ~~and weigh~~ all gas containers as they are leaving and entering storage;

**B. The regulation should specify the entity that will certify scales.**

The Proposed SF6 Regulation must specify the entity that will certify the accuracy of the scales to be used. Unless a central authority is nominated, the manufacturers of the scales appear to be the most reasonable entities for this role.

SCPPA therefore suggests the following changes to section 95354(a) of the Proposed SF6 Regulation:

(2) Weigh all gas containers at the beginning of each calendar year on a scale that is certified by the manufacturer of the scale to be accurate to within one percent of the true weight;

## VI. SECTION 95355, RECORDKEEPING

**A. Defined term “GIS Owner” should be used.**

The first line of section 95355 refers to “Owners of gas insulated switchgear.” If this phrase is intended to refer to “GIS Owners” as defined in section 95351(a)(7), the defined term should be used to avoid the potential for confusion.

Therefore, SCPPA suggests the following change to section 95355 of the Proposed SF6 Regulation:

~~Owners of gas insulated switchgear~~ GIS Owners must: ...

**B. Gas containers only need to be weighed annually.**

As discussed above, requiring more frequent weighing of gas containers is not consistent with the need to determine annual SF6 leakage and calculate an annual emissions rate, and increases employee workload unnecessarily. A more reasonable and useful approach would be to track when SF6 is transferred into and out of GIS equipment.

SCPPA proposes the following amendments to section 95355(b) of the Proposed SF6 Regulation:

(4) A chronological record of the dates on which accounting, by weight in pounds, of SF6 is transferred into or out of the container Active GIS Equipment;

(5) The current SF6 residual, by weight in pounds, as of the most recent weighing of the container.

**C. Electronic records and jointly-owned records should be addressed.**

The Proposed SF6 Regulation should accommodate instances where electronic storage of documents is done off-site, and even out-of-state, by the GIS Owner (or the operator of the GIS equipment, if the owner delegates recordkeeping responsibility to the operator).

SCPPA suggests that the following paragraph be added to section 95355(d) of the Proposed SF6 Regulation:

(3) GIS owners may retain records outside of California if such records are electronically stored or jointly owned in the normal course of business.

**D. Sufficient time is needed to prepare records for inspections.**

While SCPPA has no objection to ARB inspections, GIS owners should be given sufficient time to collect the records and prepare them for inspection. Records may need to be extracted from a central database, or obtained from the operator in cases where the owner and the operator are different entities.

SCPPA suggests that the following phrase be added to section 95355(e) of the Proposed SF6 Regulation:

(e) Have all records available for ARB inspection at time of inspection, provided that the ARB gives 15 business days' advance notice of inspection; and ...

## VII. SECTION 95356, ANNUAL REPORTING REQUIREMENTS

### A. The first report should be due in 2012.

SCPPA understands that the ARB intends to correct section 95356(a) of the Proposed SF6 Regulation so that it refers to 2012 rather than 2011 as the first year in which reports are due. SCPPA supports this change as it will allow GIS Owners the time needed to obtain certified scales and implement recordkeeping systems to comply with the new requirements starting in 2011. Full compliance with the new requirements would not be possible if the first year to be reported were 2010.

### B. The equations for calculating annual SF6 emissions need to be refined.

The terms in the equation for determining annual SF6 emissions, particularly acquisitions and disbursements of SF6, need to be refined to accurately capture the movements of, and transactions involving, SF6.

An entity ("Entity A") may maintain and operate its own GIS equipment as well as maintaining and operating GIS equipment on behalf of another entity ("Entity B"). Entity A may use the same SF6 gas containers to service its own equipment as well as the equipment belonging to Entity B.

Entity A may sell SF6 to Entity B in several ways: (a) by selling GIS equipment to Entity B; (b) by selling containers of SF6 to Entity B; or (c) by refilling Entity B's equipment with SF6. All of these transactions should be captured as disbursements of SF6 for Entity A and acquisitions of SF6 for Entity B.

In addition, if Entity A extracts SF6 gas from GIS equipment owned by Entity B and adds it to Entity A's gas in storage, this should be counted as an acquisition for Entity A.

To address these situations, SCPPA suggests the following amendments to section 95356(d) of the Proposed SF6 Regulation:

Where: ...

Acquisitions of SF6 = (SF6 purchased from chemical producers or distributors, or operators of GIS equipment-in-bulk) + (SF6 purchased from equipment manufacturers or distributors, or operators of GIS equipment, with or inside non-hermetically sealed GIS equipment) + (SF6 returned to site after off-site recycling) + (SF6 extracted from GIS equipment owned by another GIS owner and put into the reporting entity's storage).

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

It would also be useful if the Proposed SF6 Regulation referred to or included the reporting form from the US EPA SF6 Program (amended as required to use the defined terms in the Proposed SF6 Regulation), as guidance to entities in calculating their annual SF6 emissions.

**C. Defined term “Active GIS Equipment” should be used.**

According to section 95352 and the definition of “Emissions Rate” in section 95351(a)(3), the maximum annual SF6 emission rate is intended to be calculated for “Active GIS Equipment” as defined in section 95351(a)(1).

However, the term “Active GIS Equipment” is not used in the detailed calculation of the annual SF6 emissions and the annual SF6 emission rate that is set out in sections 95356(d) and (e). Section 95356(d) uses the broader term “non-hermetically sealed GIS equipment,” and section 95356(e) refers to GIS devices “in active service.” To be consistent, the defined term “Active GIS Equipment” should be used in those sections.



A second issue with the emissions formulae is the use of the “directional” terms “Decrease in SF6 inventory” and “Net increase in total nameplate capacity.” SCPPA would prefer the more neutral term “change” as used in the US EPA SF6 Program reporting form.

SCPPA therefore suggests the following amendments to the calculation of annual SF6 emissions in section 95356(d) of the Proposed SF6 Regulation:

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

Where: ...

~~Decrease~~Change in SF6 inventory = ...

~~Net increase~~Change in total nameplate capacity of ~~non-hermetically sealed~~Active GIS Equipment ~~operated~~ = (the nameplate capacity of new ~~non-hermetically sealed~~Active GIS Equipment) – (Nameplate capacity of ~~retiring non-hermetically sealed~~ GIS equipment that is no longer Active GIS Equipment).

If the proposed change set out in section D below is not accepted, the following amendment should be made to the annual SF6 emission rate calculation in section 95356(e) of the Proposed SF6 Regulation:

Where: ...

$d_i$  = The number of days during the year that the GIS device constituted Active GIS Equipment ~~was in active service~~

**D. A simpler calculation of system nameplate capacity should be adopted.**

Section 95356(e) of the Proposed SF6 Regulation requires the average system nameplate capacity to be calculated using the number of days each piece of GIS equipment was in service throughout the year. GIS equipment may be removed from service during the year for repair, replaced by a spare piece of equipment, and then placed back into service at a later time.

Tracking the number of days each piece of equipment was in active service during the year is far beyond current industry practice.

This requirement would be administratively burdensome, would increase the time and effort required for recordkeeping and to calculate the annual emissions rate, and would significantly increase the potential for errors. For example, a large utility with over 500 pieces of GIS equipment would have to track and multiply the nameplate capacity and days in active service of each individual piece of equipment, then calculate the average each year. The hours of labor to accomplish this alone could far exceed the amounts per year estimated in the ISOR for recordkeeping and reporting.

The US EPA takes a simpler approach in both the US EPA SF6 Program and draft subpart DD of the Mandatory Reporting Rule: entities must report the total nameplate capacity of SF6 equipment at the beginning of the year, new equipment purchased during the year, and equipment retired during the year. This approach captures changes made to the active GIS equipment during the year without imposing significant additional recordkeeping and reporting burden.

SCPPA recommends that the US EPA's approach be adopted in section 95356(e) of the Proposed SF6 Regulation, as follows:

Equation for determining emissions rate:

$$\text{Emission Rate} = \frac{\text{Annual Emissions per subsection (d) (lbs)}}{C_{\text{avg}} \text{Total nameplate capacity of Active GIS Equipment at end of year (lbs)}}$$

Where:

$$\text{Total nameplate capacity of Active GIS Equipment at the end of year} = (\text{total nameplate capacity of Active GIS Equipment at the beginning of the year}) + (\text{nameplate capacity of Active GIS Equipment added during the year}) - (\text{nameplate capacity of Active GIS Equipment removed during the year})$$

The remainder of section 95356(e) can be deleted.

**E. Emissions from jointly-owned GIS equipment should be allocated proportionately to each owner.**

Transmission and distribution facilities and GIS equipment may be jointly owned.

However, section 95356 of the Proposed SF6 Regulation does not address how to account for jointly owned facilities in the annual report. The Proposed SF6 Regulation needs to specify how jointly-owned equipment should be divided among and reported by the individual owners.

The simplest approach would be for each owner to report the portion of emissions and nameplate capacity of the jointly owned equipment equal to their equity share. In practice, the operator of the GIS equipment will likely be required (under contract with the GIS owners) to collect and provide the data to the owners, then each owner will report their share of the emissions based on ownership share.

SCPPA suggests that the following paragraph be added at the end of section 95356 of the Proposed SF6 Regulation:

(f) Joint ownership. Where GIS equipment is jointly owned by two or more GIS owners, each joint owner must multiply the annual emissions from, and the nameplate capacity of, the jointly owned GIS equipment by its percentage equity share (ownership or entitlement share) in that equipment, and include that share of the emissions and nameplate capacity in its annual emissions rate calculation.

**VIII. SECTION 95358, ENFORCEMENT**

**A. Reporting entities should have the opportunity to correct unintentional inaccuracies or deficiencies in reports before penalties are imposed.**

It is not reasonable to impose daily penalties on a reporting entity for unintentional reporting errors or deficiencies of which it is not aware, particularly in the first few years when the reporting requirements are new and reporting entities are implementing new operational and recordkeeping procedures in order to comply with the new reporting requirements. To be fair,

penalties should be imposed only after the ARB has informed the reporting entity of the inaccuracy or incompleteness in the report, and the reporting entity has failed to take steps to remedy the deficiency within the allotted grace period.

SCPPA suggests the following changes to section 95358 of the Proposed SF6 Regulation:

(b) Each day or portion thereof that any report required by this subarticle remains unsubmitted, is submitted late, or contains incomplete or inaccurate information shall constitute a single, separate violation of this subarticle (subject to section 95358(c)).

(c) Any report that a reporting entity submits in good faith and reasonably believes to be complete and accurate at the time of submission shall not be deemed incomplete or inaccurate for the purposes of section 95358(b) until the reporting entity receives a notice from the ARB identifying the deficiency and requesting corrected or additional information. If the reporting entity provides the requested information within 30 days of receiving the notice, the report shall be deemed to be complete and accurate as of the date of original submission.

**B. Daily penalties for exceeding the maximum annual emissions rate are not appropriate.**

The enforcement provisions in the Proposed SF6 Regulation should be appropriate for an annual compliance obligation. A daily penalty as currently proposed in section 95358(c) is not consistent with an annual compliance obligation. The Proposed SF6 Regulation is based on compliance with an annual average emission rate, where the emissions rate is calculated over the entire year. Therefore, exceeding the annual emission rate should constitute a single violation, not 365 separate daily violations.

Where regulations specify daily requirements or emission limits, imposing daily violations for exceeding those limits is appropriate. However, imposing daily violations is a right, not an obligation, of the ARB – and this right is limited to situations where it is “appropriate.” Section 35850(b)(3) of the Health and Safety Code states:

“The state board **may** develop a method to convert a violation of any rule ... adopted by the state board pursuant to this division into

the number of days in violation, **where appropriate**, for the purposes of the penalty provisions ...” (emphasis added)

Daily penalties are not appropriate where the obligation is annual rather than daily. Greenhouse gas regulations are different from criteria pollutant regulations, and they should be treated differently when it comes to enforcement. ARB has not provided any objective criteria to justify converting compliance with an annual limit into separate daily violations.

The Low Carbon Fuel Standard, which also imposes an annual obligation, does not refer to daily violations.

In the absence of objective criteria for imposing daily violations, SCPPA suggests the following changes to section 95358(c) of the Proposed SF6 Regulation:

(de) Any exceedance of the maximum allowable SF6 emission rate for a calendar year shall constitute a single, ~~separate~~ violation of this subarticle ~~for each day of the calendar year~~.

**C. More detail on the assessment of penalties should be included.**

Section 95358(a) of the Proposed SF6 Regulation refers to section 38580 of the Health and Safety Code, which in turn refers to the penalties set out in various sections of Part 4 and Part 5 of Division 26. These sections contain many and varied penalty provisions. The Proposed SF6 Regulation should include more detail on the basis upon which penalties for breach of the Proposed SF6 Regulation – both monetary and otherwise – are determined and administered.

In particular, the Proposed SF6 Regulation should contain a mechanism to determine the penalty for exceeding the annual emission rate, which should be proportional to the degree by which the annual limit was exceeded.

**IX. CONCLUSION**

SCPPA urges the ARB staff to consider these comments in developing a revised draft of the Proposed SF6 Regulation. SCPPA appreciates the opportunity to submit these comments to the ARB.

Respectfully submitted,

*/s/ Norman A. Pedersen*

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