

Victor Yamada

10-2-2

**COMMENTS OF SOUTHERN CALIFORNIA EDISON COMPANY TO THE
CALIFORNIA AIR RESOURCES BOARD ON THE PROPOSED REGULATION
FOR REDUCING SULFUR HEXAFLUORIDE EMISSIONS FROM GAS
INSULATED SWITCHGEAR**

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Dated: February 24, 2010

I.

INTRODUCTION

Southern California Edison Company (“SCE”) is pleased to comment on the proposed Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear (“Proposed Regulation”) released by the California Air Resources Board (“CARB”) on January 7, 2010. SCE appreciates the time and effort spent by staff in drafting the proposed regulation and hosting numerous stakeholder workshops.

II.

EXECUTIVE SUMMARY

SCE offers the following specific comments on the Proposed Regulation, followed by a discussion of each provision:¹

- The requirement to weigh a container each time that gas is transferred into or out of it should be deleted.
- The calibration and data collection requirements should be delayed until January 1, 2011 and should not be retroactive to January 1, 2010. Recordkeeping and reporting should not be mandated before the regulation is adopted.
- CARB should adopt the nameplate capacity reporting requirement contained in U.S. EPA’s draft SF₆ reporting rule.
- For enforcement purposes, an exceedance of the annual emission limit should be treated as a single violation, instead of treating each day during the exceedance period as a separate violation.

¹ SCE is also a signatory to the letter from a group of utilities dated February 24, 2010.

III.

COMMENTS

A. Inventory Measurement Procedures

According to the Initial Statement of Reasons (ISOR) for the Proposed Regulation, staff assumed that annual recordkeeping and reporting costs would approximate \$500 to \$1900 in the first compliance year and \$20 to \$960 thereafter.² The ISOR characterized the new annual recordkeeping and reporting requirements as “minimal.”³ Contrary to that statement, the Proposed Regulation includes reporting and requirements that are far more extensive than current industry practices. As a prime example, the Proposed Regulation requires each gas container to be weighed before and after gas is transferred into or out of the container. Presently, gas containers are weighed at the beginning and end of the year, in accordance with the U.S. EPA’s mass balance calculation method for its voluntary SF₆ reporting program. (The same method is currently specified in the proposed regulation.) Weighing the gas containers at the beginning and end of the year is sufficient to determine the annual usage and would be sufficient for calculating annual emissions as required by Section 95356(d) of the Proposed Regulation. Increasing the frequency of weighing the gas containers would increase the burden on field staff unreasonably, while providing no material improvement in data collection.

The previously noted labor burden and data management costs would be considerably higher than estimated in the ISOR if per-use weighing in part of the recordkeeping process. SCE estimates the cost of establishing a new computerized inventory and recordkeeping system as over \$200,000. Attachment A is provided with estimated cost documentation. Given these issues, particularly the fact that per-use weighing is not

² See Initial Statement of Reasons at page ES-4.

³ *Id.* at 20.

required in order to comply with the central requirement of the Proposed SF₆ Regulation, the maximum annual emissions rate, the owners of gas-insulated switchgear (GIS) should be required to weigh gas containers only on an annual basis.

B. Calibration and Data Collection

The calibration and data collection requirements should be delayed until January 1, 2011 and should not be retroactive to January 1, 2010. Recordkeeping and reporting should not be mandated before the regulation is adopted.

C. Enforcement

SCE recommends that for enforcement purposes, an exceedance of the annual emission limit should be treated as a single violation, instead of treating each day during the exceedance period as a separate violation.

D. System Nameplate Capacity

Section 95356(e) of the Proposed Regulation requires the average system nameplate capacity to be calculated using the number of days on which 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 on which each piece of equipment was in active service during the year is not necessary and is beyond current industry practice.

This requirement would increase the time and effort required for recordkeeping and to calculate the annual emissions rate, and would significantly increase potential for errors. For example, a large utility with over 900 substations and multiple circuit breakers at each substation 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 U.S. EPA uses a simpler method in its SF₆ program and draft subpart DD of its reporting rule. This approach requires entities to 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 a significant additional recordkeeping and reporting burden. SCE recommends that the Proposed Regulation adopt this method.

E. Miscellaneous

1. Certification Entity

SCE also suggests that Section 95354(a) of the Proposed Regulation be amended to specify the entity that will certify the scales (e.g., the manufacturer).

2. Annual Reporting Requirements

SCE understands that CARB intends to revise Section 95356(a) so that it refers to 2012 as the first year in which reports are due. SCE supports this change because 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.

IV.

CONCLUSION

SCE appreciates the opportunity to comment on CARB's Proposed Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear and looks forward to working with CARB to finalize a fair and workable rule.

Respectfully submitted,

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February 24, 2010

Attachment A

**Southern California Edison's Cost Estimate Documentation of Establishing a New
Computerized Inventory and Recordkeeping System**

SF₆ Business Requirements Introduction

1. Goals & Objectives

The objective of this project is to develop a standard repeatable process and reporting tool to be used by field personnel and management to accurately track and monitor the use, purchase, residual, and recycling of SF₆ gas for the purposes of reporting. Specifically, the reporting provides the mandated and regulated documentation of SF₆ gas, by category, to various external agencies including United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB).

2. Overview

■ Scope

A. In Scope Deliverable – Phase 1

1. SF₆ gas tracking tool that allows for electronic format for reports generated.
2. Tracking tool reporting will be based on the Federal & State methodology.
3. Updated repeatable business process.
4. Training of end-users.

■ General Requirements

- 1) Tracking and reporting system shall generate reports on demand.
- 2) Special access must be granted to view the annual report.
- 3) On day one, the tracking and reporting system shall be able to generate the following reports:
 - Recycled SF₆ Gas Report
 - Reclaimed SF₆ Gas Report
 - Yearly SF₆ Inventory Reporting Protocol and Form
- 4) Tracking and reporting system must be able to perform mass balanced calculations for:
 - change in inventory
 - purchases/acquisitions of SF₆
 - sales/disbursements of SF₆
 - change in total nameplate capacity of equipment
 - total annual emissions
- 5) Multiple reports can be viewed / accessed in the same session simultaneously. (Multi-user)
- 6) Annual reports shall be locked for editing and stored.
- 7) Tracking and reporting system shall provide capability to generate reports in an electronic format to be used for distribution internally and externally. (Meaning, the reports cannot be edited after they are completed.)
- 8) System must be integrated with existing Work Management and Asset Tracking systems to improve accuracy and minimize double data entry
- 9) System must track SF₆ bottle and maintenance cart location, use, and weight continuously during the year
- 10) System must be able to maintain an inventory of calibrated SF₆ scales along with their calibration schedules
- 11) We must acquire current accurate tare weights on all bottles used for storing SF₆ gas
- 12) We must improve SF₆ bottle identification methodologies
- 13) Tracking and reporting system must be developed so that it can be integrated

with future systems.

14) Tracking and reporting system shall accommodate 150 users.

■ ***User Requirements***

15) Users shall have the ability to input data and generate reports in the system.

16) Tracking and reporting system can be used from different geographical locations.

17) Reports can be generated from different geographical locations simultaneously (multi-user)

18) User shall be directed by the system to input data based on the work that was performed.

19) Authorized users shall only be granted access to view reports for their respective Area of Responsibility (AOR).

■ ***Technical Requirements***

20) Tracking and reporting system shall have the ability to distinctly store input data.

21) Tracking and reporting system must be scalable.

22) Data input and report generation shall be done on demand. (Meaning, system is always available.)

23) Tracking and reporting system shall accommodate any number of users concurrently. (Multi-user).

24) Data must be backed up daily. (Schedule TBD).

25) Tracking and reporting system shall be available 24/7/365.

26) Graphical User Interface (GUI) shall be the method/form for gathering data and generating reports.

27) Tracking and reporting system shall capture record input history (who, what, when for input data) data will be stored. (Archival strategy TBD).

28) Tracking and reporting system shall include data warehouse (use of business objects TBD).

29) For initial release, circuit breaker asset information shall be retrieved from existing systems.

30) Tracking and reporting system shall provide ability to store and forward input data from users.

31) Tracking and reporting system shall provide ability for annual report to accept manual input before report is completed, generated and stored.

32) Tracking and reporting system shall provide ability to generate reports based on user pick list of input data fields.

3. Constraints

Integration with future systems.

4. Assumptions and Dependencies

■ ***Open Questions:***

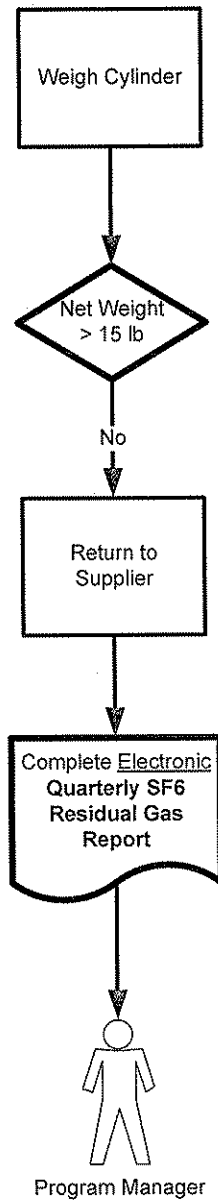
- What is the requirement for disaster recovery?
- What is the requirement for business continuity?
- How much data will be stored annually?

■ **Assumptions**

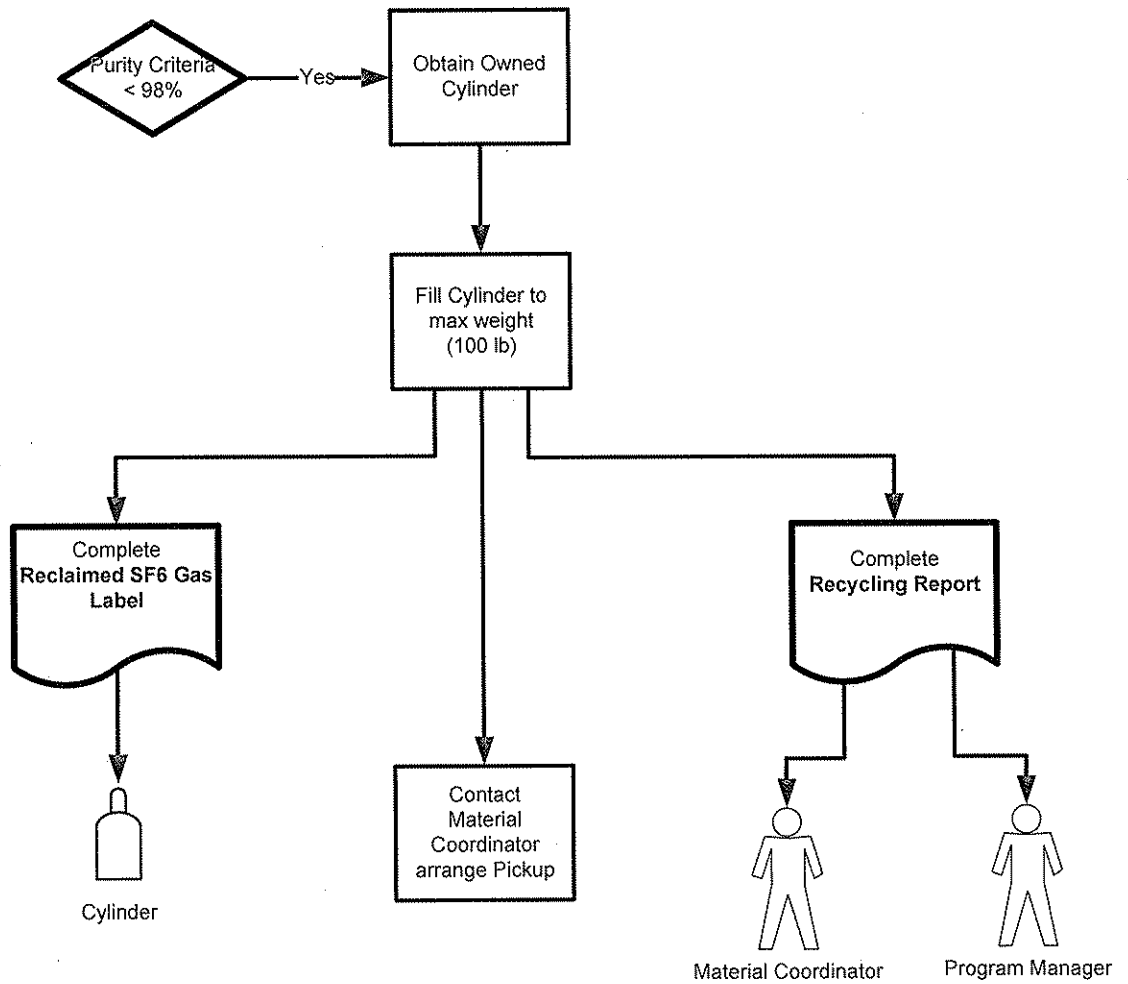
- Only system owner can grant access to this tracking and reporting tool.
- Users have been granted the appropriate access by system owner.

5. **Business Functions**

Residual Gas (Vendor)

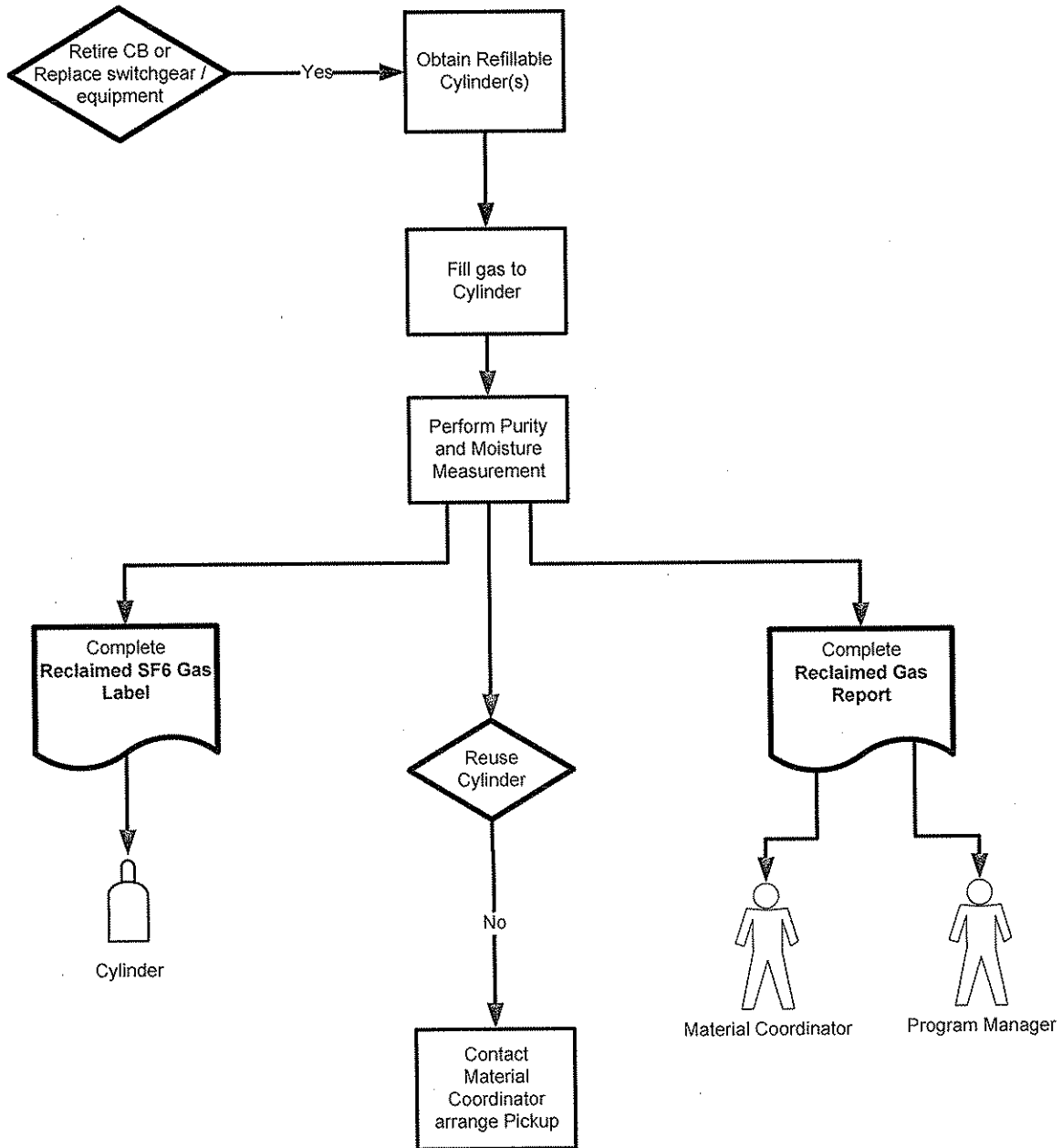


Recycled Gas

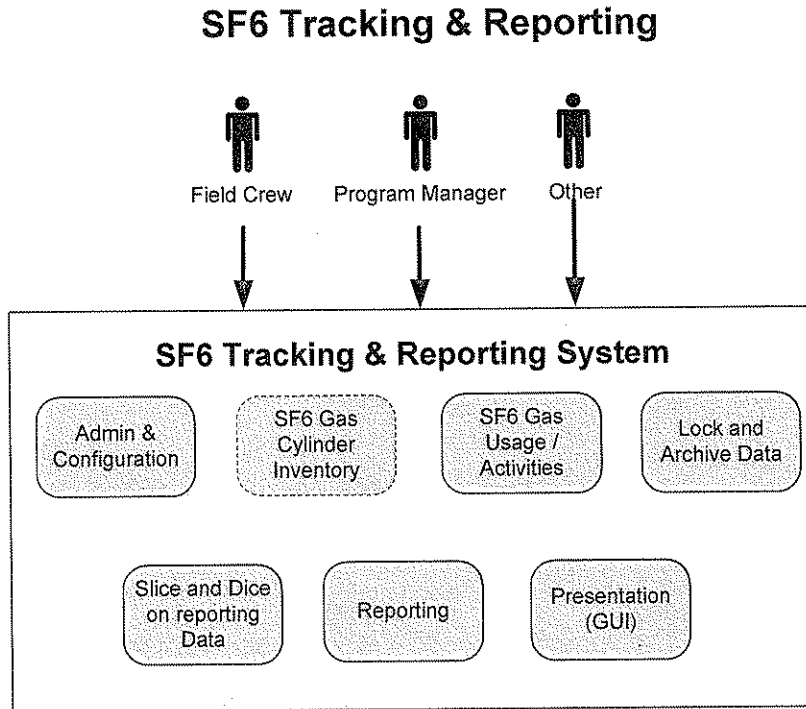


- Utility sends the cylinders to vendor
- Vendor cleans and fill the tank
- Utility buys back the gas

Reclaimed Gas



6. Preliminary Solution Architecture



7. Statement of Work

▪ Purpose and Background

Sulfur hexafluoride (SF₆) gas is used as an insulating medium in high voltage equipment. It is a potent "greenhouse gas" that has the potential to contribute to warming of the atmosphere. More specifically, SF₆ is used for its dielectric properties in gas insulated switchgear, gas insulated bus, and gas insulated transmission line equipment, and is the dielectric/interrupting medium of choice in high voltage power circuit breakers.

In 1999, the United States Environmental Protection Agency (USEPA) began working with electric utilities to voluntarily reduce SF₆ gas emissions and developed a Memorandum of Understanding (MOU) agreement. As outlined in the MOU, Utilities participating adopted all practices to comply with this voluntary agreement.

The need to improve gas administration processes has become evident, as well as the need for proper documentation and control of SF₆ gas inventories as an essential part of the Gas Management Program. As part of the program, reporting by specific dates was established for document submittal:

- Recycled SF₆ Gas Report – due when cylinders are shipped
- Reclaimed SF₆ Gas Report – due when cylinders are shipped
- Quarterly SF₆ Residual Form – due by the end of March, June, September and December
- Yearly SF₆ Inventory Form – due by the 2nd week of January

Because of the emphasis on gas emission reduction, this voluntary MOU will be deemed a mandated and regulated program as required by legislation beginning in 2011; financial impact to the Utilities in California may occur for non-compliance.

The key component to this program is to manage, document, and report the inventories of residual, recycled, and reclaimed gas for regulatory and auditing purposes.

8. I.T. Infrastructure Assessment

- Additional 10G of data storage

9. Goals & objectives

The objective of this project is to develop a standard repeatable process and tracking tool to be used by field personnel and management to accurately track and monitor the use, purchase, residual, and recycling of SF₆ gas for the purposes of reporting.

The reporting provides the mandated and regulated documentation of SF₆ gas, by category, to various external agencies including United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB). (electronic report submission)

10. Scope

In Scope Deliverable – Phase 1

1. SF₆ gas tracking tool that allows for electronic format for reports provided
2. Tracking tool reporting will be based on the prescribed CARB methodology
3. Updated repeatable business process
4. Training of end-users

11. Custom Application Development

Implement a custom built solution which will be used as the front end for SF₆ tracking system. The system will be able to store data in the individual laptop when the field crew is out in the field. Data will be sync'd back to the master database once the laptop is connected to the network.

Change Description	Subsystem	Affected Component

Major Assumptions

Pros

1. Have the flexibility of modifying business process in capturing more information for future compliance rules.
2. Application will be hosted by the utilities
3. Specific information can be loaded for the annual report.
4. Will be ready for tracking data in the fourth quarter of 2010.

Cons/Risks

1. Higher maintenance cost.

Significant Risks

Risk	Potential Project Impact	Mitigation Strategies

Project Cost Estimates

	Conf Level %	Capital Labor Hours	Capital Labor Dollars	Expense Labor Hours	Expense Labor Dollars	1-Time Capital Dollars	1-Time Other Dollars	Total Costs
Estimate	50%	0	\$0.00	3552	\$230,880.00	\$0.00	\$0.00	\$230,880.00
Subtotal		0	\$ 0.00	3552	\$230,880.00	\$ 0.00	\$ 0.00	\$230,880.00

Cost Assumptions

The above mentioned cost only reflects the items listed below and defined as:

- **Initial Costs**
 1. System development
 2. System integration with existing applications
 3. System rollout
 4. System training
 5. Reports development
 6. Hardware
 7. Data backup/restoration system

Additional costs to maintain all aspects of the California Air Resources Board CARB legislation for SF₆ maintenance include short and long term costs which will require further analysis and development of estimates.

- **Long Term Costs**
 1. Training (New employees, remedial)
 2. Time spent weighing bottles
 3. Time spent inputting data into SF6 tracking system
 4. Annual calibration of scales
 5. Data acquisition and analysis
 6. Annual agency report preparation, review and approval
 7. Additional scales
- **Short Term Costs**
 1. Time spent in response to an audit
 2. Time spent to request an exemption in case of an unusual event
 3. Replacement scales
 4. Replacement servers
 5. System upgrades and maintenance

Susie Berlin
10-2-2

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

February 24, 2010

Mary D. Nichols, Chair
California Air Resources Board
1001 I Street
Sacramento, CA

Re: **Comments of the Joint Utilities Regarding *Proposed SF₆ Regulation***

The Northern California Power Agency,¹ Pacific Gas & Electric Company, Sacramento Municipal Utility District, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Public Power Authority² ("Joint Utilities") appreciate the opportunity to provide these comments to the California Air Resources Board ("CARB") on the *Proposed Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear* ("SF₆ Regulation" or "Proposed Regulation"), issued January 7, 2010.

I. INTRODUCTION

The Joint Utilities have worked with CARB Staff over the last nine months to develop a regulation that meets the following objectives: (1) reduces emissions of SF₆ from gas insulated switchgear used in the electrical power generation, transmission and distribution system, (2) avoids being overly prescriptive, (3) avoids creating unnecessary work and record keeping burdens for compliance entities, (4) minimizes additional cost burdens for consumers, and (5) maintains reliable operation of the State's electricity infrastructure.

¹ The members of the Northern California Power Agency include the cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah plus Bay Area Rapid Transit District, Port of Oakland, the Truckee Donner Public Utility District, and the Turlock Irrigation District. Associate members are the Plumas-Sierra Rural Electric Cooperative and the Placer County Water Agency.

² The members of the Southern California Public Power Authority are Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles Department of Water and Power, Imperial Irrigation District, Pasadena, Riverside, and Vernon.

The State's utilities provide an essential public service critical to California's financial success, and are the primary entities subject to this regulation. The Joint Utilities support the State's objectives and propose the revisions discussed herein in order to minimize adverse impacts on California's electricity customers and ensure that the final regulation meets all of the stated objectives. These comments propose changes to the Proposed Regulation in the order in which they appear in Subarticle 3.1 – *Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear*, and not necessarily in order of importance.

II. COMMENTS ON THE PROPOSED REGULATION

A. The Definition of Active GIS Equipment Should be Expanded.

§ 95351. Definitions.³

(a) (1) “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 on-site ready for service, and which employs a mechanism to monitor potential emissions. “Active GIS equipment” does not include equipment in storage.

Joint Utility Comment: The definition of Active GIS Equipment should be expanded to include all equipment that is fully charged, even if such equipment is not conducting electricity. There are many instances where Active GIS Equipment does not meet the proposed definition above, but due to the manner in which it is intended for use, should be included in the calculation for Active GIS Equipment used for compliance purposes. Active GIS Equipment should also include spare equipment that is fully-charged and stored on-site, ready for use. The Joint Utilities understand that CARB also wishes to ensure that such equipment is subject to inspections and monitoring, which can be successfully accomplished through a variety of different means. The Joint Utilities propose that the Regulation not be drafted in a prescriptive manner that specifies the exact type of monitoring to be employed, as the efficiency and cost-effectiveness of different monitoring systems will be contingent upon the specific utility/regulated entity. Accordingly, the Joint Utilities recommend that the definition of Active GIS Equipment be revised to allow for in-service equipment that is connected to the system, and

³ There are currently two definitions numbered §95351(a)(2).

equipment that is fully charged and kept on-site ready for service, and that employs a monitoring mechanism the type of which is left to the discretion of the regulated entity.

B. The Definition of an Emergency Event Should Not be Limited to Natural Disasters

§ 95351. Definitions.

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

Joint Utility Comment: The current Emergency Event definition is too narrowly defined, and does not adequately address the kinds of emergency events that are likely to occur that could result in an unpreventable release of SF₆. Emergency Events are not limited to natural disasters, and unforeseen events beyond the control of utility operators can take many forms. Although not anticipated, there are instances where acts of terrorism, vandalism, or freak accidents may result in unavoidable emissions. Rather than limit the definition of the emergency event to natural disasters, the Joint Utilities recommend that the limitation be placed on "events" beyond the control of the utility operator or unpreventable in the face of prudent utility practices, consistent with the language already set forth in § 95353. Such an expanded definition is consistent with the definitions for emergency events used in other CARB regulations.⁴

C. The Emissions Rate Definition Should Be Modified For Consistency With Section 95356(e).

§ 95351. Definitions.

(a) (3) "**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 system SF₆ nameplate capacity of all active GIS equipment.

Joint Utility Comment: The emissions rate definition refers to total SF₆ nameplate capacity, but this term is not defined, and section 95356(e) uses the term 'average system nameplate capacity' in the emission rate calculation. The Joint Utilities recommend that the Draft Regulation be revised make this definition and the calculation description consistent.

⁴ See, for example, § 93118.3. *Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port*, which addresses instances outside the control of the operator, and §§ 95380 to 95398, *regarding the Management of High Global Warming Potential Refrigerants for Stationary Sources*, which specifically addresses leaks associated with natural disasters, and ATCM for Stationary Compression Ignition Engines (Stationary Diesel Engine ATCM).

D. The Emergency Event Exemption Should be Effective With the Onset of the Regulation.

§ 95353. Emergency Event Exemption.

(a) After January 1, ~~2012~~ 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: . . .

- (1) Could not have been prevented by the exercise of prudence, diligence, and care; and
- (2) Was either:
 - i) beyond the control of the GIS owner or operator, or
 - ii) was necessary to avoid immediate electrical system outages.

Joint Utility Comment: The Joint Utilities are pleased to see the inclusion of an Emergency Event provision in the Proposed Regulation, however, recommend that this exemption be allowed as of the effective date of the regulation. Events beyond the control of the utility operator can be catastrophic and result in unavoidable SF₆ emissions. The Proposed Regulation accurately recognizes that these kinds of events should not be viewed in the same light as negligent acts that result in unwarranted emissions. However, Emergency Events can occur at any time. Despite the fact that the total allowed emissions rates are higher in the beginning years of the program, if an Emergency Event occurs early on in the regulation period, the need for the Emergency Event Exemption is just as critical as a smaller event in the later years. In addition, a single event, even if small, would be proportionately larger in comparison to nameplate capacity for a smaller utility, and thereby would indicate an earlier need for the exemption. Accordingly, the Joint Utilities recommend that the Regulation be revised to allow for application of Emergency Events from the effective date of the Regulation.

E. The Emergency Event Exemption Request Should be Made Within 60 Days of the Occurrence of the Event.

§ 95353. Emergency Event Exemption.

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

Joint Utility Comment: More than 30 days should be allowed for submitting an Emergency Event Exemption request. Due to the nature of some events, a leak may not be immediately discovered, even through due diligence, especially in instances where the underlying event caused widespread damage or disturbance to a utility's operations. Furthermore, during such time utility personnel will be focused on repairs and restoration of utility services, rather than report writing. Accordingly, it is prudent to allow for additional time to prepare and compile the necessary paperwork to submit to the regulatory agency following the occurrence of an emergency event. The Joint Utilities recommend that the Draft Regulation be revised to allow additional time for the regulated entities to submit the request for exemption so that the primary focus in the days immediately following an emergency event can be on facilities operations.

E. SF₆ Containers Should Be Weighed Annually.

§ 95354. SF₆ Inventory Measurement Procedures.

(a) 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;

Joint Utility Comment: Gas containers should be weighed once a year in order to calculate the SF₆ emissions inventory. The Proposed Regulation establishes an annual compliance obligation on covered entities. Nothing is gained by increasing the frequency with which the canisters must be weighed. To the contrary, this additional requirement increases the burden on staff and the potential for error. Accordingly, the Joint Utilities recommend that the Regulation be drafted consistently with an annual compliance obligation and require that the canisters of gas be weighed annually.

With the addition of these weigh-in/weigh-out requirements, the Proposed Regulation contemplates reporting and recordkeeping requirements that are far more extensive than current industry practices. The cost to sustain such requirements will not be minimal. As more fully discussed below, the assumptions set forth in the Initial Statement of Reasons ("ISOR") that "*per-utility recordkeeping and reporting costs for the first year would range between approximately \$500 and \$1,900*" and that "*[a]nnual recordkeeping and reporting costs for*

succeeding years would range between \$240 and \$960 per entity,” (ISOR, p. E-S 4) are not realistic based on utility assessments of the implementation costs of the Proposed Regulation.

The ISOR notes that “[t]he 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.” (p. 20) The Joint Utilities strongly disagree with this assessment. The additional reporting and recordkeeping obligations contemplated in the Draft Regulation are far greater than those already employed by utilities. Indeed, some utilities estimate that the additional record-keeping processes required in the Draft Regulation will require in excess of 2 full-time-equivalent personnel, and could cost hundreds of thousands of dollars in the initial years. The ISOR goes on to state that “SF₆ emission reduction activities will incur a cost savings during the initial years of the ten year regulatory period and will continue to be minimal until the final three years of this period.” (p. 20) As estimated by some utilities, the costs associated with the additional personnel needed to cover the record keeping and accounting will exceed the cost savings associated with reduced SF₆ usage and will not result in any further emissions reductions.

Accordingly, the Joint Utilities Recommend that § 95354 be revised to reflect an annual weighing requirement for all SF₆ canisters, and that the canisters.

F. The SF₆ Containers Should be Weighed on Scales that are Certified by the Manufacturer.

§ 95354. SF₆ Inventory Measurement Procedures.

(a) GIS owners must do all of the following: . . . (2) Weigh all gas containers on a scale that is certified by the manufacturer of the scale, to be accurate to within one percent of the true weight;

Joint Utility Comment: Currently, the Draft Regulation does not specify the entity that is required to certify the scales used to weigh the gas containers. The Joint Utilities recommend that the scales be certified by the manufacturer.

G. The Inventory Provisions Should be Revised to Account for Annual Weighing of the Gas Containers.

§ 95355. Recordkeeping.⁵

(b) Establish and maintain a current and complete inventory of gas containers, which includes the following information for each container: . . . (4) An annual chronological accounting, by weight in pounds, of SF₆ transferred into or out of the container; . .

Joint Utility Comment: The Joint Utilities recommend that the recordkeeping provisions of § 95355 should be revised to reflect the annual weighing requirements, consistent with the discussion above.

H. The Regulation Should Allow Off-Site and Out-of-State Record Storage.

§ 95355. Recordkeeping.

Add (d)(3) “GIS owners may retain records outside of California if such records are electronically stored or jointly owned, and are thus retained in the normal course of business.”

Joint Utility Comment: Not all records are stored at the facilities where the SF₆ is located. Indeed, some entities employ off-site and out-of-state electric data storage systems that ensure the safekeeping of essential data. In order to accommodate these common storage practices, the Proposed Regulation should be revised to accommodate instances where records are stored electronically, offsite, and/or out-of-State.

I. Compliance Entities Must Have Sufficient Time to Compile Requested Documents for Inspection.

§ 95355. Recordkeeping.

(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 . . . ;”

Joint Utility Comment: While the Joint Utilities are more than willing to share documentation and records for CARB staff inspections, adequate time must be provided for utilities to gather the necessary documents. Document may not all be in the same place, and

⁵ The Joint Utilities support the proposed revisions to § 95355 set forth in the Comments of the Southern California Public Power Authority, dated February 16, 2010, pages 11-13.

copies may need to be made. Accordingly, the Joint Utilities recommend that that § 95355(e) be revised to allow fifteen days notice to the compliance entity for any document inspection.

J. Annual Reporting Under the New Regulation Should Begin in 2012.

§ 95356. Annual Reporting Requirements.⁶

(a) Beginning in calendar year ~~2011~~ 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.*: . . .

Joint Utility Comment: Reporting under the new Regulation should not be mandated prior to adoption of the regulation. The reporting requirements contemplated in the Draft Regulation are new and go beyond what is currently required under CARB's Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, and what is done under Environmental Protection Agency's (EPA) SF₆ Emission Reduction Partnership for Electric Power Systems. Accordingly, it would not be possible to provide 2010 data that is consistent with the requirements of the Proposed Regulation, as would be mandated by § 95356(a). As such, the Joint Utilities recommend that the Annual Reporting Requirements mandated in § 95356 begin in calendar year 2012 for emissions occurring in 2011.

K. The Enforcement Provisions in the Proposed Regulation are Not Consistent with an Annual Compliance Obligation and Should be Revised to Remove Daily Penalty Provisions.

§ 95358. Enforcement.

(a) ~~Penalties.~~ Penalties may be assessed for any violation of this Subarticle, including failure to submit necessary reports, pursuant to Health and Safety Code section 38580, and guidelines established in a public process. ~~Each day during any portion of which a violation occurs is a separate offense.~~

~~(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.~~

~~(b)(e) 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.~~

⁶ The Joint Utilities support the proposed revisions to § 95356 set forth in the Comments of the Southern California Public Power Authority, dated February 16, 2010, pages 13-17.

(c)(d) *Injunctions*. Any violation of this subarticle may be enjoined pursuant to Health and Safety Code section 41513.

Joint Utility Comment: Penalties for annual compliance obligations should not be assessed on a daily basis. As a practical matter, it is imperative that enforcement of the program be comprehensive and transparent, and that penalties be fairly assessed and administered. A daily penalty provision for an annual compliance obligation does not meet these criteria.

To date, the majority of CARB's Nonvehicular Air Pollution regulations, permits, and limits have been based on daily maximum levels and include ongoing compliance periods. The Proposed SF₆ Regulation, on the other hand, is an annual compliance obligation which measures an entity's compliance for the entire year. Since the compliance obligation is based on annual measurement, the daily emission levels throughout the year are neither known, nor relevant.

A daily penalty metric is not consistent with an annual compliance obligation, notwithstanding CARB's discretionary authority to impose such a penalty. While Health and Safety Code⁷ section 38580(3) provides that:

the state board may develop a method to convert a violation of any rule, regulation, order, emission limitation, or other emissions reduction measure 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 of. . . (emphasis added),

clearly it is not "appropriate" to do so when the regulation at issue is based on a maximum annual emission rate. Enforcement of the Proposed Regulation must be reconciled with the express provisions of Health and Safety Code section 38580(3), which requires that penalties be **appropriate**. In this case, a daily penalty provision for an annual compliance obligation is not appropriate and is inconsistent with state law.

Despite the significant discretion that Staff may have in applying penalties that are commensurate with the violation by reviewing factors such as the extent of harm, nature and persistence of the violation, a utility's record of maintenance, duration of violations, and how far over the limit the utility is, these discretionary factors do not support the application of a daily penalty provision. Rather, these factors can, and should, be applied when reviewing the extent of a penalty to apply, but such penalty should have its basis in the single violation at issue – the

⁷ Unless otherwise noted, all code sections references shall be to the Health & Safety Code (H&S).

exceedance of the **maximum annual SF₆ emissions rate** set forth in § 95352. Arguably, the only day for which a violation can be contemplated under the provisions of § 42400 is the final day of the compliance year. An appropriate method for calculating penalties may be to consider the number of pounds of SF₆ by which an entity exceeded the annual limit.

The Joint Utilities also believe that the enforcement provisions should be based on clearly defined guidelines that are developed as part of a public process. It is simply insufficient to say that "penalties may be assessed pursuant to Health and Safety Code § 38580." Specific language stating what the penalties are and how they are determined must be included in the regulation or accompanying guidelines. Parties should be afforded a view of the due process and penalty structure they may face for failure to comply with the new regulations. Insight into the penalty structure will help send a clear signal to participants about what is expected. The development of such language should be addressed in a public forum.

Additionally, in the event that monetary penalties are assessed, the penalty calculation metric should be included in the regulation or in publicly developed guidelines. The calculation and determination of the penalty should be crafted to deter non-compliance by removing any economic benefits of non-compliance, and take into account the compliance entity's culpability in the exceedance, including intentional or negligent acts. Furthermore, CARB must remain cognizant of the broad range of entities to which the regulation will apply, which includes not only the State's large utilities, but small publicly owned utilities, as well as colleges and universities that maintain electric equipment subject to the regulation. Accordingly, the penalty provisions should be crafted as to recognize instances where maximum SF₆ levels are exceeded, but not through malfeasance or negligence on the part of the compliance entity, and the penalty metric must not be so onerous as to preclude the ability of a compliance entity to pay the fee and continue meeting ongoing and future compliance obligations.

The Joint Utilities recommend that the provisions of §95358 be revised to strike the daily penalty language and allow for the development of comprehensive guidelines that ensure that the enforcement provisions are consistent with the State's goals of ensuring compliance with the regulation and punishing noncompliance through malfeasance.

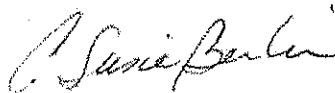
III. CONCLUSION

The Joint Utilities appreciate the opportunity to provide these comments to the Board and are hopeful that the necessary revisions addressed herein will be included in the Regulation. Utilities provide an essential public service critical to the success of our State, and as the primary entities subject to this regulation, the Joint Utilities believe that making these changes will ensure a structure under which California can continue to effect cost-effective GHG reductions, while not jeopardizing the viability of California's electric utilities, nor the provision of safe and reliable electricity to the State's consumers.

Respectfully submitted,

THE JOINT UTILITIES

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