April 26, 2019

Ms. Carey Bylin
Manager, Energy Section
Industrial Strategies Division
California Air Resources Board
1001 I Street, Sacramento, CA 95814

RE: SCE Comments Regarding the Discussion Draft of Potential Changes to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

Dear Ms. Bylin,

Southern California Edison ("SCE") appreciates the opportunity to comment on the California Air Resources Board's ("CARB") Discussion Draft of Potential Changes to the Regulation of Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear ("Discussion Draft") as presented in the February 25, 2019 CARB workshop.

SCE understands the importance of reducing greenhouse gas (GHG) emissions, specifically from high global warming potential gases, and supports the phase-out of sulfur hexafluoride (SF_6) from gas insulated switchgear. SCE is committed to a clean energy future and has an obligation to the 15 million people in the communities we serve to deliver safe, reliable, clean and affordable energy.

SCE appreciates the dedication of the CARB Staff over the past 18 months to learn and understand the unique challenges of the individual utilities and the manufacturers producing gas insulated equipment (GIE). We recognize the substantial effort CARB Staff has taken to develop a regulation that will reduce GHG emissions and be achievable and cost-effective while preserving safety and reliability in the electricity grid. In order to help achieve this shared goal, SCE offers the following recommendations for your consideration.

I. The proposed baseline ("average CO_2e capacity") should account for planned load growth projects and the use of SF_6 containing GIE when alternatives are not yet commercially available.

Over the next three years, SCE is projecting an 11% increase in load growth due to: 1) economic growth in California, 2) maintaining/improving grid reliability, 3) an influx of new substation/transmission line projects to connect renewable power and meet California's renewable energy goals by 2025, and 4) replacing obsolete and high risk equipment to increase grid resiliency and safety.

Replacement of legacy equipment must be a consideration when establishing a baseline threshold; SCE's existing oil switch and oil circuit breaker replacement programs are key to maintaining high service reliability. These programs target oil filled equipment which are approaching the end of their service lives and pose a threat to both system reliability and public and employee safety. If non-SF_6 alternatives are unavailable to replace this existing oil-filled equipment, SF6 GIE may be the only replacement option.

It is also important to note that electrification of our transportation sector is critical to meeting the state's ambitious greenhouse gas reduction goals. SCE is committed to both encouraging customers to switch from fossil fuel transportation to zero-emission vehicles, and to meeting the needs of all customers as the electric transportation sector continues to grow, increasing demand on the grid.

CARB's Discussion Draft, which proposes holding 2019 nameplate capacity as an unchangeable baseline ("average CO_2e capacity"), would have significant negative impacts on SCE's ability to meet demand, promote reliability/safety, and implement upcoming infrastructure projects supporting renewable energy and electric vehicles. A 2019 baseline year does not allow the utilities to account for projects that have already entered the multi-year planning, engineering, and licensing/permitting process. Currently, especially for the higher voltages, non- SF_6 equipment is not yet commercially available. As such, in many cases, SCE has already purchased SF_6-containing equipment for projects occurring within the next few years. The baseline must account for equipment for which SCE has issued a purchase order to the manufacturer for in-flight projects that will be operational after 2019.

SCE supports CARB's proposal to establish an annual emissions limit to replace the current annual emission rate limit. However, in order to account for in-flight load growth projects through 2024, and in order to align with the Discussion Draft, Table 1, Phase-out Dates, we propose that CARB hold the emissions to a rate no greater than 1% until January 1, 2025, and then hold 2025 as the baseline year for average CO_2e capacity.

Proposed edits to §95352.2, Annual Emissions Limit, are indicated below in <u>underlined</u> and ~~strikethrough~~ text:

§95352.2, Annual Emissions Limit
(a)<u>(1)</u> GIE owners that are subject to the annual emissions limit shall establish their emissions limit using the following formula:

$$\text{Emissions Limit} = AEF_i/100 * \text{Average } CO_2e \text{ Capacity}$$

Where:

Emissions limit	=	The GIE owner's emissions limit in data year *i* ($MTCO_2e$).
AEF_i	=	The annual emission factor from Table 2 for data year *i*.

Prior to phase-out:

Average CO_2e capacity	=	The GIE owner's average CO_2e nameplate capacity value for ~~the first~~ data year *i*, ~~after 2018~~ until 2025, in which average CO2e capacity is equal to or greater than 5,500 $MTCO_2e$.

After phase-out:

Average CO_2e capacity	=	The GIE owner's average CO_2e capacity value for the first data year, after ~~2018~~ 2024, in which average CO_2e capacity is equal to or greater than 5,500 $MTCO_2e$.

(a)(2) Qualifying Capacity Change. GIE owners may update their average CO_2e nameplate capacity baseline and annual emissions limit when the GIE owner obtains a technical infeasibility exemption to include nameplate capacity of exempted GIE.

II. The technical infeasibility exemption process should be made more practicable.

SCE supports a provision for technical infeasibility exemption after phase-out, in the event that manufacturers are unable to produce a viable alternative to SF_6 GIE that is proven effective. SCE recommends the following improvements to the current draft technical infeasibility provision.

a) The exemption process should allow categorical exemptions.

In order to streamline the exemption process for both CARB staff review and for preparation by equipment owners, SCE recommends allowing categorical exemptions for a specific voltage and class of equipment that may be installed at multiple locations within a designated reasonable timeframe (at a minimum, one year). After the designated timeframe, the GIE owner could restart the bid process to determine whether new technology has since become available.

SCE's distribution system has over 30,000 units of GIE. Based on recent installation averages, SCE typically installs approximately 1,800+ SF_6 distribution switches per year. Approximately 59% of the installations are 600-amp belowground mainline switches. These 600-amp switches require a 25 kA-symmetric short-circuit current withstand rating for SCE system short-circuit currents upwards of 22 kA; additionally, they must be compact in size and have top-mounted bushings to accommodate existing infrastructure. Another major category of GIE (accounting for approximately 36% of SCE's yearly distribution GIE installations) are 200-amp belowground radial switches. These switches must be compact in size to accommodate existing infrastructure, and the majority of these are also required to have internal current-limiting fusing for safe operation of SCE's radial systems. SCE has found that non-SF_6 market alternatives that meet SCE's electrical, physical, and operational requirements do not currently exist for these categories of switchgear. Therefore, if a given class of equipment, such as one described above, is not available on the market after the phase-out date, CARB has the potential to receive thousands of technical infeasibility exemption requests from SCE alone. Grouping similar exemptions over a specified timeline will streamline the exemption process and significantly reduce

labor costs for both CARB and SCE associated with procurement processes (i.e. going to bid for each exemption), application, review and approval.

b) Adjustments are needed to the proposed timeline for the submission, review, and approval of the technical infeasibility exemption.

Under industry standards, bid prices are valid for 90 days. Within that 90-day timeframe, the following activity would need to be completed:

Day 1 - 30	GIE owner evaluates bids received against technical and commercial bid requirements (see Item C below). If non-SF_6 GIE is not available or not suitable for the project or application, then GIE owner would prepare a technical infeasibility exemption request and submit it to CARB.
Day 31 –70	CARB reviews the technical infeasibility exemption request, requests additional information if needed, and issues decision.
Day 70 - 90	GIE owner prepares paperwork to award contract.

Therefore, in order to allow the GIS owner to adequately evaluate the bids and prepare the paperwork for procurement, SCE requests that CARB review and approval of the technical infeasibility request be completed within 30-40 days.

c) Non- SF_6 *GIE technology should not be required until it is available from at least two suppliers.*

SCE maintains a robust and competitive supplier selection and procurement process in order to ensure grid resiliency and affordability for our customers. Many suppliers may not meet minimum qualifications to do business with SCE. As such, SCE recommends that CARB require that non- SF_6 GIE technology must be available for purchase from *at least* two suppliers to be considered technically feasible for a GIE owner.

As part of SCE's procurement process, suppliers must be approved to do business with SCE both technically and commercially, and supplier equipment must first be evaluated to meet or exceed SCE specification requirements. Suppliers are evaluated through factory audit, and technical and commercial bid evaluation, for acceptance by SCE for the following work activities:

- Quality program requirements;
- Design and change control;
- Fabrication methods;
- Factory acceptance testing;
- Installation and field services;
- Packing and transportation work methods;
- Safety program evaluation; and
- Cybersecurity requirements.

SCE tests a supplier's apparatus/equipment through a trial or pilot installation (lasting typically one or more years) to confirm all operational requirements are met. Any apparatus/equipment that fails to

meet one of the criteria above would be deemed not qualified (disqualified) and would not be approved for installation in SCE's service territory.

The procurement process also requires commercial availability of more than one vendor to prevent a monopoly on a certain product. In addition to monopoly concerns, this protects SCE from complete reliance on a single source that could go bankrupt or otherwise become unable to supply the product.

Proposed edits to §95355.3, Technical Infeasibility Exemption, are indicated below in underlined and ~~strikethrough~~ text:

§95355.3, Technical Infeasibility Exemption

(a) A GIE owner may submit a technical infeasibility exemption to allow for the acquisition of SF_6 GIE after the phase-out date indicated in Table 1 if either:

(5) Non- SF_6 GIE technology is not available for purchase from more than one manufacturer.

(b) ...

(3) For individual exemption, the specific project (including location) and application to which the technical infeasibility exemption would apply; for categorical exemption, the voltage class and application to which the technical infeasibility exemption would apply.

(c) The Executive Officer shall review and respond to the exemption request within 30 calendar days and ~~acknowledge receipt within 15 days. Subsequently, the Executive Officer~~ shall notify the submitter of her or his approval or denial of the technical infeasibility exemption, pursuant to section 95355.3(b). If necessary, the Executive Officer will solicit additional data from the submitter to inform the decision. In the event the Executive Officer has not responded to the submitter within 30 days of the initial electronic submittal of the technical infeasibility exemption request, or within 10 days of electronic submittal of additional data from the submitter, the technical infeasibility exemption is deemed approved. ~~60 days of acknowledging receipt of the technical infeasibility exemption, or within 60 days of receiving additional data from the submitter, the technical infeasibility exemption Is approved.~~

...

(e) Technical Infeasibility exemptions are valid for the life of the GIE.

(f) For categorical exemption, an entity may install GIE of the same voltage class and application in various locations for up to one year after the approval date. Technical infeasibility exemptions granted under categorical exemption are valid for the life of the installed GIE. After one year, if the non-SF6 technology is still not available and the GIE owner needs to install new SF6 GIE for the given class and application, the GIE owner must reapply for the categorical exemption.

III. In emergency or life-threatening situations, the immediate like-for-like replacement of SF_6 GIE should be allowed.

In the Discussion Draft, CARB requires technical infeasibility exemptions to be submitted at least 75 days prior to the intended date of SF_6 GIE acquisition. SCE recognizes that advanced approval is reasonable for normal, planned installation. However, situations may arise during unplanned emergencies, or catastrophic/life-threatening incidences where equipment **must** be replaced immediately in order to protect system reliability and customer safety. Other essential public services rely upon the reliability of the electrical system, such as hospitals, water-treatment facilities, first responders, critical communication facilities, financial institutions, critical air navigation systems, and medically sensitive residential customers. SCE must be able to act immediately to restore the grid after natural disasters such as wildfires, earthquakes, or floods.

In order to address this critical issue, SCE recommends that CARB include an emergency procedure that allows for the immediate replacement of SF_6 GIE and requires notification to CARB and submittal of justification within 30 days of installation.

Proposed edits to §95355.4, Emergency Event Exemption are indicated below in underlined and ~~strikethrough~~ text:

§95355.4, Emergency Event Exemption

(a) A GIE owner may immediately replace SF_6 equipment that has failed from an emergency event that impacts system reliability. The GIE owner may replace the failed SF_6 equipment with other SF_6 equipment. The GIE owner must submit relevant information regarding the emergency event pursuant to section 95355.4(b). A GIE owner may exclude emissions from an emergency event that impacted one or more active GIE from the GIE owner's annual emissions as calculated pursuant to section 95355.4(b) if it is demonstrated to the Executive Officer's satisfaction that the release of insulating gases could not have been prevented by the exercise of prudence, diligence, and care, and was beyond the control of the GIE owner.

IV. The SF_6 Phase-Out Table should be expanded to recognize anticipated commercial availability of Distribution-level GIE.

SCE supports ARB's tiered phase-out schedule for new GIE purchases that is dependent upon the commercial availability of non-SF_6 equipment for each voltage class of equipment that is economically feasible and is linked to a robust technical infeasibility exemption process to ensure the SF_6 GIE phase-out does not compromise the safety, reliability, and integrity of the electrical system.

SCE requests further granularity in Table 1, specifically to incorporate Distribution-level equipment, in order to accurately represent the variability in the timing of the technology available for different equipment ratings and applications. SCE generally utilizes two voltage class ratings (17.5 kV and 38kV) for its multi-way distribution switchgear, with switchgear of both voltage classes having short-circuit

current withstand ratings of 25kA symmetrical to withstand SCE short-circuit currents upwards of 22kA. SCE has found that SF_6-alternative multi-way padmount distribution switchgear in the 38kV voltage class with a short-circuit current withstand rating of 25 kA does not currently exist in the marketplace. Additionally, SCE has also found that 17.5 kV or 38 kV-rated multi-way belowground distribution switchgear with short-circuit current withstand ratings of 25kA symmetrical does not exist in the marketplace either. As such, SCE is working with its equipment suppliers to develop viable SF_6 -free alternatives that achieve the necessary operational requirements, electrical ratings, and physical dimensions to operate safely and reliably on its system. Due to the challenges imposed by the reduced footprints required in belowground vault environments, and with the expectation that technology developed for belowground configurations will likely be directly applicable to padmount configurations, SCE estimates the commercial availability of non- SF_6 equipment for all belowground distribution applications and for aboveground distribution applications requiring equipment with voltage ratings greater than 17.5 kV will occur much later than that of aboveground distribution switchgear rated less than 17.5kV.

It is important to note that, in addition to equipment costs, ancillary costs associated with installing a larger vault structure to accommodate larger footprint non-SF_6 equipment would be approximately six to ten times greater than the costs associated with a like-for-like-footprint switchgear replacement. These additional costs may include real estate acquisitions, cost of the new structure, associated civil work, relocation of other utilities' infrastructure (communication towers, gas lines, water lines, etc.), city permitting, traffic control, and customer outages during construction time.

The phase-out dates proposed below are based on consultation and feedback from major manufacturers.

Proposed edits to §95352, Sulfur Hexafluoride Phase Out, Table 1, Phase-out Dates for Distribution GIE**,** are indicated below in <u>underlined</u> and ~~strikethrough~~ text:

§95352, Sulfur Hexafluoride Phase Out, Table 1, Phase-out Dates for Distribution GIE

	Voltage (kV)	SCE Proposed Phase-out Date	CARB Discussion Draft Phase-out Date
Distribution (aboveground[1])	≤ 17.5	1/1/2025	n/a
	17.5 < kV ≤ 38	1/1/2031	n/a
Distribution (belowground)	≤ 38	1/1/2031	n/a

Items in blue are categories proposed by SCE for inclusion in Table 1, Phase-out Dates

[1] Aboveground distribution includes padmount or pole-mounted equipment

V. Modify SF_6 Phase-out Table dates to be consistent with commercial availability and minimum testing requirements of Substation-level GIE.

SCE supports CARB's tiered phase-out schedule for new GIE purchases that is dependent upon the commercial availability of non-SF_6 equipment for each voltage class of equipment that is economically feasible and is linked to a robust technical infeasibility exemption process to ensure SF_6 GIE phase-out does not compromise the safety, reliability and integrity of the electrical system.

SCE proposes Substation level phase-out dates which are based on anticipated manufacturer availability and also allow necessary time to appropriately evaluate, test, install and pilot new equipment for safe and reliable operation.

Once non-SF_6 equipment is considered commercially available by a manufacturer, SCE must follow a strict process before installing new equipment on SCE's electric system:

i. **Project design and specification writing (8 to 18 months lead time)**: substation apparatus must create a specification with project specific details for a vendor to begin to develop and manufacture compatible equipment for SCE's electrical system.
ii. **Competitive bid, bid evaluation and award (3to 6 months lead time)**: Once the specification is approved it is then shared externally with other vendors through Request for Information or Request for Proposal.
iii. **Manufacture of equipment (8 to 14 months lead time):** Manufacturer time to manufacture and deliver equipment.
iv. **Utility pilot testing and evaluation (60 months lead time):** substation apparatus must then perform a full technical evaluation in parallel with Supply Chain Management's commercial evaluation.

	Voltage Levels	Commercial Availability Date of Non-SF_6 Equipment (Year)[2]	Lead Time for Project Design & Apparatus Spec Writing (# of months)	Competitive Bidding & Selection Process (# of months)	Manufacture of non-SF_6 Equipment (# of months)	Project Timing, Utility Pilot Testing & Evaluation of non-SF_6 Equipment (# of months)	Phase Out Date = (Commercial Availability Date) + (Project Design & Spec Writing) + (Competitive Bidding) + (Manufacture of Equipment) + (Utility Pilot Testing & Evaluation)
Substation	72.5 kV	1/1/2022	8	8	8	60	1/1/2029
	145 kV	1/1/2022	8	8	8	60	1/1/2029
	245 kV	1/1/2026	9	6	9	60	1/1/2033
	550 kV	1/1/2028	16	6	14	60	1/1/2036

Proposed edits to §95352, Sulfur Hexafluoride Phase Out, Table 1, are indicated below in underlined and ~~strikethrough~~ text:

§95352. Sulfur Hexafluoride Phase Out, Table 1, Phase-out Dates for Substation:

	Voltage (kV)	SCE Proposed Phase-out Date	CARB Discussion Draft Phase-out Date
Substation	≤ 72.5	1/1/2025	n/a
	72.5 < kV ≤ 145	1/1/2029	1/1/2025
	145 < kV ≤ 245	1/1/2033	1/1/2029
	> 245	1/1/2036	1/1/2031

Items in blue are categories proposed by SCE for inclusion in Table 1, Phase-out Dates

VI. Apply specific labeling requirements to only newly purchased GIE.

Discussion Draft S95352(a)(2) requires that GIE owners must ensure all GIE and gas containers are clearly marked or labeled such that it is readily apparent which gas they are to be filled with, starting January 1, 2022. We interpret this language as requiring the physical verification of labeling on existing equipment for our 25,500+ gas switches.

SCE's existing population of distribution SF_6-gas-filled switches consists of approximately 15,800+ belowground 600-amp mainline switches, approximately 9,000+ belowground 200-amp radial switches, and 800+ aboveground padmount 600-amp mainline switches. Based on this population breakdown and assuming that SCE's underground inspection crews can inspect approximately 2 underground vaults per day, it would take approximately 7,900 crew-days for SCE to verify its existing population of belowground 600-amp mainline switches, making the proposed compliance date of January 1, 2022 impracticable. Additionally, a large subset of these vaults are located underneath vehicular traffic lanes, thereby requiring traffic control, road closures, and associated permitting. This labeling requirement increases safety risk to our crews and the public without the benefit of decreasing actual emissions or improving system reliability. Therefore, SCE proposes that specific labeling requirements apply to only newly purchased GIE.

Proposed edits to §95352(a)(2), GIE Labeling, are indicated below in underlined and ~~strikethrough~~ text:

§95352(a)(2), GIE Labeling.
Starting January 1, 2022, GIE owners must ensure that all newly installed GIE and all gas containers containing gases with a GWP greater than 1 are clearly marked or labeled such that it is readily apparent which gas they are to be filled with. Existing GIE and gas containers containing gases with a GWP greater than 1 not clearly labeled shall be assumed to contain SF_6.

VII. Maintain the nameplate capacity adjustment process as optional.

A regulatory mechanism to adjust inaccurate nameplate capacity would be beneficial in correcting and reporting accurate emissions. SCE requests that this process be *optional,* not required, because it will not reduce actual emissions of SF_6, and it is not feasible to remove active equipment from service in order to pull gas simply to verify nameplate.

Responses to §95355.2, Potential new section, "Nameplate Capacity Adjustments"

CARB has requested feedback from the utilities on potential new section 95355.2:

i. Does the proposed methodology minimize the risk of emissions?

No, the proposed methodology would not minimize the risk of actual SF_6 emissions. It would only help with accuracy of reporting. In fact, the procedure could potentially increase risk of leakage during SF_6 gas handling by requiring additional gas handling outside of normal operational and maintenance practices.

ii. Which non-hermetically sealed SF_6 GIE should be required to go through the process (e.g., non-hermetic, equipment of a specific type, equipment manufactured before a certain date, equipment above a certain capacity or above a certain percentage of the GIE owner's total capacity)?

The process should be optional, to be performed when the GIE owner has reason to believe the nameplate capacity is incorrect.

For distribution equipment, it would not be possible for SCE to comply with the process as written because SCE cannot feasibly evacuate and refill thousands of SF_6 switches during their service life; SCE distribution only actively handles SF_6 gas at end-of-equipment-life, whereupon SF_6 gas is evacuated from the GIE at a centralized location after the equipment has been removed from service in preparation for salvaging. Interrupting service by de-energizing a circuit in order to remove active in-service GIE solely to measure gas to verify nameplate accuracy would increase safety risk to SCE crews and the public without the benefit of decreasing actual emissions or improving system reliability. Therefore, the process should be optional. If the process is not optional, it should only be required for GIE designed to contain more than 35 lbs of SF_6, since SCE distribution equipment typically contains less than 35 lbs of SF_6.

iii. Should all GIE owners be required to complete the process (e.g., GIE owners not subject to the emissions limit, grant GIE owners a choice)?

The process should be optional, to be performed when the GIE owner has reason to believe the nameplate capacity is incorrect. GIE owners should be able to choose whether they want to take advantage of the nameplate correction process on an individual equipment-by-equipment basis.

iv. When should the process be performed (e.g., end of GIE life, as part of routine maintenance schedule)?

For distribution and substation equipment, this optional procedure could be performed at end-of-equipment-life when gas is permanently evacuated from the equipment and does not require refilling. Additionally, specific to substation equipment, this process could be performed anytime maintenance would already require gas evacuation. Completing a nameplate correction when gas evacuation is already being performed would reduce unnecessary risk of emissions by reducing the number of times the gas must be handled.

v. What should the cut-off date be after which the process can no longer be performed?

The process should be optional, to be performed when the GIE owner has reason to believe the nameplate capacity is incorrect. If the process is not optional, there should not be a cut-off date because SF_6 equipment may be in service for longer than its estimated service life.

vi. Should CARB require that a consistent method be used for calculating revised nameplate capacity? If not, how can CARB be assured of consistent results?

Due to variances in individual GIE owners' specific SF_6 gas handling equipment and procedures, SCE recommends the option for each GIE owner to provide their own methodology to calculate revised nameplate capacity subject to CARB approval. This will ensure consistency within each respective GIE owners' reporting. Alternatively, CARB may consider allowing the use of manufacturer recommended procedure for the Nameplate Adjust methodology, since the limiting factor is from the recovery equipment manufacturer.

VIII. Inventory management plans should be maintained onsite to comply with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) mandatory reliability standards.

While SCE concurs that maintaining a standardized inventory management plan (IMP) for cylinder tracking is essential, reporting entities should maintain their respective IMPs onsite. IMPs can be made available to CARB staff for inspection upon request. Since IMPs would contain confidential information subject to NERC-CIP (i.e., substation and GIE locations) mandatory reliability standards, it would be a violation of these national regulatory standards to disclose this documentation to the public. Our proposed approach would also harmonize the IMP requirement of this regulation with the current GHG MRR regulation and other GHG reporting protocols.

Proposed edits to §95355(a)(1)(A), Measurement Procedures, are indicated below in underlined and ~~strikethrough~~ text:

§95355(a)(1)(A), Measurement Procedures.

(a)(1)(A) By April 1, 2021, GIE owners must ~~electronically submit~~ establish and maintain written procedures used to track gas containers to CARB. ~~CARB staff may notify the GIE owner that additional information must be added to the procedures to meet the requirements of section 95355(a)(1)(C). In the~~

~~*event said notification is received by the GIE owner, the GIE owner must update the procedures and electronically submit the revised procedures to CARB within 60 days.*~~

IX. Revise the definition of "substantive error" to exclude minor administrative errors that do not impact emissions.

SCE recommends a change in the definition of 'Substantive Error' to be consistent with other CARB GHG regulations such as the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (MRR) and the Low Carbon Fuel Standard, and avoid unintended risks of non-compliance in the event of minor administrative errors associated with recordkeeping and reporting that do not impact emissions.

Proposed edits to §95351, Definitions and Acronyms, are indicated below in underlined and ~~strikethrough~~ text:

§95351, Definitions and Acronyms.
"Substantive Error" means an error that affects calculated emissions, data used to calculate emissions, or any other data element required to be reported pursuant to section 95353(a), (b), (e), (f), (g), (h), (i) and (j) of the annual report, resulting ~~from a nonconformance of this regulation.~~ in a change in emissions greater than 5%.

X. For gas carts specifically, allow the nameplate value of the cart to be reported to CARB, in lieu of weighing the cart.

As written, the regulation requires gas containers be weighed twice per year. Since gas carts are listed in the definition of "gas container", the regulation implies that gas carts must also be weighed twice per year. The scales are not conducive to weighing the bulky/heavy gas cart itself (that could weigh up to 4,500 pounds) which would contain a minimal amount of gas that is held at a relatively consistent amount and pressure. As such, SCE recommends that the nameplate value on gas carts be reported to CARB, in lieu of the requirement to weigh the actual cart twice per year.

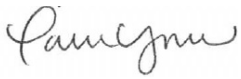
Proposed edits to §95353, Reporting Requirements, are indicated below in underlined and ~~strikethrough~~ text:

§95353, Reporting Requirements.
ADD *Section 95353(G)(5)(E): GIE owners with gas carts may report the gas cart nameplate value (pounds) in the annual report in lieu of weighing the cart at the end and beginning of each data year or when the cart is added or removed from the inventory.*

Conclusion

SCE thanks CARB staff for the opportunity to provide comments on the Discussion Draft. We look forward to continuing to work with you to reduce GHG emissions while maintaining safety and reliability in the electricity grid.

Respectfully,



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