



Elizabeth A. Cason
Senior Counsel
8330 Century Park Court, CP32B
San Diego, CA 92123
Tel: 858-654-1560
ecason@semprautilities.com

April 26, 2019

Ms. Carey Bylin, Energy Section
Industrial Strategies Division
California Air Resources Board
1001 I Street, Sacramento, CA 95812

Subject: San Diego Gas and Electric Company's Comments to the Discussion Draft of Potential Changes to the Regulation for Reducing Sulfur Hexafluoride (SF6) Emissions from Gas Insulated Switchgear (GIS), dated February 22, 2019.

Dear Ms. Bylin,

San Diego Gas and Electric Company (SDG&E) appreciates the opportunity to submit these comments in response to the Discussion Draft of potential changes to the California Air Resources Board's (CARB) Regulation for Reducing SF6 Emissions from Gas Insulated Switchgear, dated February 22, 2019.

SDG&E has organized its comments by selected sections, as presented in the Discussion Draft.

§ 95351 Definitions and Acronyms

SDG&E recommends a change to the definition of 'Substantive Error' to 'Correctible Error' with the following proposal, to be consistent with other CARB GHG regulations:

~~"Substantive Error"~~ *"Correctible Error"* means an error that affects calculated emissions or data used to calculate emissions, or any other data element required to be reported pursuant to section 95353(a), (b), (e), (f)(5)(6)(8)(9)(10)(11), (g)(1)(3)-(7), (h), (i) and (j) of the annual report, resulting in a change in emissions greater than 5%, ~~resulting from a nonconformance of this regulation.~~

§95352(a)(1) Sulfur Hexafluoride Phase Out

The regulation must ensure that phase-out of SF6 does not compromise the utilities' ability to provide safe and reliable electricity. The tiered phase-out schedule for new GIE purchases is dependent upon the commercial availability of non-SF6 equipment for each voltage class of equipment; is cost-effective; and is linked to a robust technical exemption mechanism to ensure the SF6 GIE phase-out does not compromise the safety, reliability and integrity of the electricity system.

The proposed SF6 phase out schedule in the Discussion Draft addresses transmission level GIE but did not consider availability of non-SF6 alternatives for distribution level GIE. SDG&E recommends that CARB include a phase out schedule that addresses electrical distribution level equipment (rated < 38kV), as well as transmission level equipment, as follows:

Proposed Equipment Phase-out Dates	
Voltage (kV)	Phase-out Date
≤ 17.5 kV (Aboveground)	January 1, 2025
$17.5 < kV \leq 38$ (Aboveground)	January 1, 2031
≤ 38 kV (Belowground)	January 1, 2031
≤ 72.5 kV	January 1, 2025
≤ 145 kV	January 1, 2027
≤ 245 kV	January 1, 2029
> 245 kV	January 1, 2031

The acquisition of GIE requires extensive advance planning, procurement and significant investment by a utility; however, in some cases an in-service GIE may require rapid replacement following a catastrophic failure. SDG&E proposes that CARB add the following sections to address each of these anticipated situations:

ADD (a)(1)(A)(3) This provision does not apply to a GIE owner who has placed a firm order for purchase or import of SF6 GIE prior to the phase out dates provided in the table above.

ADD (a)(1)(A)(4) This provision does not apply to a GIE owner who supplements gas insulated switchgear in an existing substation or expands a gas insulating substation that already uses SF₆ gas insulating switchgear.

ADD (a)(1)(A)(5) This provision does not apply to the purchase and installation of GIE parts required for the repair or maintenance of GIE in-service prior to the phase-out date.

ADD (a)(1)(A)(6) This provision does not apply to the replacement of an existing in-service GIE that has failed due to an emergency event.

§ 95352(a)(2) Label all GIE and gas containers as of January 1, 2022

SDG&E requests to strikeout this portion of the regulation as it does not add further value to the reduction of SF6 emissions. SDG&E is concerned that this requirement will significantly increase administrative cost and strain [already limited] staffing resources.

§ 95355.2 Request for Commenter Input on Potential New Section “Nameplate Capacity Adjustments”

SDG&E recommends that the draft SF6 GIS regulation be revised to clarify that the nameplate capacity adjustment process is voluntary. Further, the language should be revised to reflect that the capacity adjustment demonstration should be performed during maintenance activities or other time specified by the GIE owner to ensure that facility operations and grid reliability is not affected by the adjustment process. Finally, SDG&E recommends that GIE

owners be allowed flexibility in determining the method of calculation and ask that CARB authorize reporting entities to use the manufacturer's recommended procedure for the Nameplate Capacity Adjustment.

§ 95355.2(a) Annual Emissions Limit

The Discussion Draft sets 2019 as the baseline year for determining the nameplate capacity of SF6 for each reporting entity. After 2019, in order to add or replace SF6 canisters, a regulated entity would need to seek a technical exemption. This is problematic because it will not account for planned facility upgrades or new facilities coming online after 2019. SDG&E typically plans projects several years in advance and require acquisition of SF6 GIE that will remain inactive in 2019; as such, these acquisitions would be excluded from the 2019 baseline. Similarly, the majority of SF6 acquisitions between 2020 and 2025 will be in higher voltage categories where no SF6 alternatives currently exist. In addition, SDG&E routinely replaces aging infrastructure for reliability reasons each year. If non-SF6 alternatives are unavailable, SF6 GIE may be the only replacement option. SDG&E proposes that the proposed baseline be tied to reasonable estimates of load growth and replacement schedules while GIE alternatives are unavailable.

§ 95353(d) Reporting Deadline

SDG&E respectfully requests that CARB consider extending the reporting deadline to June 30th. Many of the regulated entities subject to this requirement are also required to report as an Electricity Providing Entity (EPE) under the GHG MRR program. The GHG MRR reporting deadline for EPEs is June 1st. The two concurrent deadlines put a significant burden on utility resources and may impact reporting accuracy and data quality, particularly with the enhanced recordkeeping requirements in the Discussion Draft.

§ 95353(g)(5)(A) End of Year Cylinder Weighing

SDG&E respectfully requests CARB to provide additional flexibility for the end of year ("EOY") measurement of containers. The Discussion Draft requires the EOY weighing of containers to be executed between December 1st and December 31st of the data year. The availability of crews to perform this type of work may be limited during the December timeframe, which may pose constraints on resources. SDG&E proposes to extend the timeframe for EOY weighing for another 15 days, ending on January 15th.

§ 95355.3 Technical Infeasibility Exemption

SDG&E supports CARB staff adding this section in the regulation as it provides GIE owners the ability to install SF6 GIE when alternatives are unavailable. Additionally, CARB should address the following issues within this section:

- a) Include the cost of non-SF6 alternatives in excess of 10% of an equivalent SF6 GIE as a criterion that will qualify a request for a technical infeasibility exemption, and availability by at least two suppliers to allow competitive bidding. SDG&E believes that the CEQA concept of "infeasibility" could be instructive here, as it defines feasible as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors..."
- b) In addition to exemptions for specific projects or applications, allow categorical exemptions for a class of equipment that may be installed at multiple locations within a

reasonable period of time (minimum of 1 year). This will streamline to application, review and approval process, and help contain increased costs with the procurement process.

- c) Revise the proposed timeline for the submission, review and approval of the technical infeasibility exemption.
- d) Clarify that the exception is valid for the lifetime of the GIE.
- e) Clarify that "standby replacement" constitutes an acceptable "project."

The following changes to this section of the Discussion Draft address some of the issues identified above:

(a) A GIE owner may submit a technical infeasibility exemption to allow for the acquisition of SF₆ GIE after the phase-out date indicated in Table 1 if either:

*(1) Non-SF₆ GIE ~~meeting~~ **does not meet** the specifications for the particular project or application ~~are unavailable~~; or*

...

*(4) ~~Available n~~ Non-SF₆ GIE is not suitable based on safety or reliability requirements; **or***

*(5) **Non-SF₆ GIE technology must be available for purchase from more than one (1) manufacturer***

*(6) **The cost of available non-SF₆ equipment is more than 10% higher than the equivalent SF₆ GIE***

- (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.~~

Conclusion

SDG&E has contributed to and supports all previously submitted comments through the California Utilities Group, with reiteration of some of those comments above. SDG&E would like to thank CARB staff for the opportunity to offer comments to the Discussion Draft regulation and continue to support the state's goal to reduce high GWP gas emissions and ensure the continued safe and reliable operation of the statewide electricity grid.

Should you have any questions please contact Mr. Brian Yim, SDG&E Senior Environmental Specialist at (858) 654-1658/byim@semprautilities.com or Ms. Elizabeth Cason, SDG&E Senior Counsel, at (858) 654-1560/ecason@semprautilities.com.

Sincerely,

A handwritten signature in blue ink that reads "Elizabeth Cason". The script is fluid and cursive, with the first name and last name clearly distinguishable.

Elizabeth Cason
Senior Counsel, SDG&E