



A  Sempra EnergySM company

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Ms. Carey Bylin, Energy Section
Industrial Strategies Division
California Air Resources Board
10011 Street, Sacramento, CA 95812

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

Dear Ms. Bylin,

San Diego Gas and Electric Company (SDG&E) submits this letter as a follow up to our letter dated April 26, 2019, to provide SDG&E's perspective on the impacts to SDG&E with regards to §95355.2(a) of the Discussion Draft regulation, along with a technical rationale.

§ 95355.2(a) Annual Emissions Limit

SDG&E proposes the annual emissions limit for substation equipment be based on the year before the phase out date. Currently the users of substation SF6 equipment have only one manufacturer and one type of non-SF6 circuit breaker commercially available for purchase. For all the other substation SF6 equipment, the technology is not commercially available. SDG&E has many new projects adding additional SF6 equipment and replacing aging oil circuit breakers (OCB) with SF6 circuit breakers. In addition, SDG&E is constructing an SF6 GIS Substation with three possible SF6 GIS substations for future installation. Since the availability of non-SF6 equipment is limited, SDG&E thinks the base year for the annual emission limit should not be 2019 as proposed in the draft regulation, but based on the year before the applicable phase out date. SDG&E also proposes the phase out dates be revised if non-SF6 GIE is not available.

New Projects with SF6 GIE installations

New 230 kV GIS Substation with 11-230 kV SF6 gas circuit breakers (GCBs), disconnects, current transformer (CTs), potential transformer (PTs), grounding switches, and bus installed (in service Dec 2022).

New 138 kV GIS Substation with 23-138 kV SF6 GCBs, disconnects, CTs, PTs, grounding switches, and bus installed (in service April 2021).

Substation Expansions adding 3-500 kV SF6 GCBs, 10-230 kV SF6 GCBs and 15-69 kV SF6 GCBs (in service Aug 2020).

OCB replacement with GCBs

20-138 kV SF6 GCBs (in service 2020-2021)

15-69 kV SF6 GCBs (in service 2020-2021)

SDG&E would like to thank CARB staff for the opportunity to offer further 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 me at (858) 654-1658 or via email: byim@semprautilities.com or Ms. Elizabeth Cason, SDG&E Senior Counsel, at (858) 654-1560 or via email: ecason@semprautilities.com.

Sincerely,

A handwritten signature in blue ink that reads "Brian Yim". The signature is written in a cursive, flowing style.

Brian Yim
Senior Environmental Specialist, SDG&E