



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

December 18, 2017

Mr. Dave Mehl
Energy Section Manager
California Air Resources Board
Industrial Strategies Division
P.O. Box 2815
Sacramento, CA 95812

Dear Mr. Mehl:

Subject: Comment Letter — Regulatory Amendments to SF6 Regulations

The Metropolitan Water District of Southern California (Metropolitan) appreciates the opportunity to comment on the California Air Resources Board's (ARB's) proposed amendments to the existing regulations governing sulfur hexafluoride (SF6) emissions from gas insulated equipment. Metropolitan is a regulated entity under the current SF6 regulations and has annually reported its SF6 emissions to ARB since 2008. This letter summarizes Metropolitan's concerns regarding ARB's proposed amendments to the SF6 regulations.

Background

Metropolitan is a regional water wholesaler that delivers approximately two million acre-feet per year to 26 member public agencies, who in turn provide water to nearly 19 million people in Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Metropolitan has 19 pieces of SF6-containing switchgear (17 in active service and 2 in reserve). Thirteen of the SF6-containing switchgear are located as part of Metropolitan's critical infrastructure that delivers water from the Colorado River Aqueduct to southern California, with the remaining four located at Metropolitan's hydroelectric power plants that provide supplemental power to the electrical grid. All of Metropolitan's gas insulated switchgear are non-hermetically sealed and contain between 15 and 206 lbs of SF6. Currently, the total amount of SF6 in service is 2,324 lbs. Hence, Metropolitan's SF6 utilization in switchgear is small compared to a typical electric utility.

Metropolitan's SF6 emissions have consistently been less than 1% of total inventory per year — the current regulatory threshold for 2020. In addition, Metropolitan has actively pursued reducing its SF6 gas container inventory as part of its good environmental stewardship efforts.



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Comments

Metropolitan offers the following comments on the proposed SF6 regulations for ARB's consideration:

§ 95352.1. Sulfur Hexafluoride Phase Out

Beginning January 1, 2025, ARB proposes to ban the installation of new SF6-containing gas insulated equipment (GIE), as well as prohibit the conversion of existing devices to SF6 as an insulating gas. As a non-electrical entity whose primary focus is water treatment, conveyance and distribution, Metropolitan is typically not an early adopter of new electrical equipment technology. In this light, Metropolitan offers the following comments on ARB's proposed SF6 phase-out approach:

- Alternatives Analysis—ARB should complete a full alternatives analysis for non-SF6 GIE prior to implementing the ban on SF6. ARB should consider cost of alternatives, potential adverse environmental and safety impacts of alternatives, footprint and space constraints, insulating capacity, reliability, and the ability to competitively bid multiple GIE vendors. Viable alternatives must be available and fully vetted prior to ARB mandating their use.
- Phase-Out Deadline—Similar to industry comments on SF6 rulemaking by ARB in 2010, Metropolitan recommends that GIEs with less than 5,000 pounds of total nameplate capacity of SF6 have an alternative phase-out date (e.g., 2030 or later). This two-tier phase out recognizes that the greatest potential for reducing GHGs would be to focus on major sources of SF6 first. As such, regulating smaller sources will not result in significant GHG reductions despite the fact that SF6 has a high global warming potential (GWP), as compared to carbon dioxide.

The majority of Metropolitan's SF6-containing GIE was installed in 2004 and is still in good working order. The two-tier phase out allows Metropolitan additional time to take advantage of electric utility pilot testing of non-SF6 GIE—which may take up to 5 years to conduct. Once the electric industry vets viable alternatives, Metropolitan would then need sufficient time to plan for capital investments to replace the existing SF6 switchgear as it reaches the end of its useful life.

- Change of Ownership—ARB should clarify if the purchase of existing SF6-containing GIE from another owner constitutes "new equipment". Metropolitan is exploring options to purchase existing GIE that is in operation and located on Metropolitan's property, but not currently owned by Metropolitan. Metropolitan seeks clarity over whether this change of ownership constitutes "new equipment" and would violate the ban on new SF6 GIE post 2025.

§ 95351. Definitions

Metropolitan requests that ARB add definitions that qualifies what constitutes "repair" and "maintenance" to § 95351. These definitions will aid industry in determining what differentiates



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“repair” or “maintenance” activities from “replacement” when determining when the prohibition for new SF6-containing GIE applies. Equipment that is well maintained and repaired according to industry specifications should not need to be replaced for many years.

§ 95354.1. Nameplate Capacity Adjustments

ARB proposes that if the manufacturer’s nameplate capacity of devices manufactured prior to 2011 is determined by the GIE owner to be inaccurate, the owner may establish a new nameplate capacity prior to January 1, 2023 based on a proscribed procedure. Metropolitan agrees that the ability to change the nameplate capacity is a positive development as it provides more regulatory flexibility. However, Metropolitan recommends removing the January 1, 2023 date for determining a new nameplate capacity. It is Metropolitan’s opinion that nameplate capacity data should be reviewed as part of normal GIE maintenance cycles and not by an arbitrary date. By removing the January 1, 2023 date, industry would forgo the added costs for off-cycle maintenance and inspection, as well as reduce the handling of SF6 during the extraction and reinsertion process.

Metropolitan also seeks to clarify that if an owner elects to revise the nameplate capacity, ARB will not seek enforcement penalties retroactively if the revised capacity data exceed those that were reported in previous years.

§ 95356. Annual Reporting Requirements

Metropolitan recommends that ARB exempt owners that elect to use zero- or near zero-GWP technology (i.e., less than 10 GWP) from the annual reporting requirements. Exempting low-GWP insulating gases from the annual reporting requirements would incentivize the industry to replace older GIEs with newer technologies by reducing their regulatory exposure. Owners would still need to report to ARB the initial switchover to low-GWP equipment, but would be exempt from reporting GHG data for those GIE thereafter.

Conclusion

Thank you again for the opportunity to comment on the proposed SF6 regulations. Metropolitan looks forward to working with ARB on this issue and asks that ARB consider these comments prior to finalizing the SF6 regulations. If you have any questions or need addition information, please contact Dr. Christopher Gabelich at cgabelich@mwdh2o.com or (213) 217-6544.

Very truly yours,

A handwritten signature in black ink, appearing to read "Daniel Guillory".

Daniel Guillory, P.E.

Interim Manager, Safety and Regulatory Services Section