



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

August 29, 2019

RE: Comments on August 15, 2019 Discussion Draft of Potential Changes to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

Dear Ms. Bylin:

The Sacramento Municipal Utility District, San Diego Gas & Electric Company, Los Angeles Department of Water and Power, Turlock Irrigation District, the California Municipal Utilities Association¹, Southern California Edison Company, the Northern California Power Agency², and Southern California Public Power Authority³ appreciate the opportunity to offer comments on the California Air Resources Board's (CARB) Discussion Draft of Potential Changes to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear, released on August 15, 2019. For the purpose of this letter, we would like to comment exclusively on the Sulfur Hexafluoride (SF₆) Phase Out Tables 1 and 2 in §95252(a).

While we support the tiered phase-out of SF₆ in gas-insulated equipment (GIE)—when coupled with a reasonable process for allowing continued SF₆ purchases and installations where safety, reliability, space, or technology issues make alternatives infeasible (e.g., SF₆ Phase Out Exemptions)—we share significant concerns about the practicability of the proposed phase-out dates included in Tables 1 and 2 §95352(a) of the Discussion Draft.

Alternatively, we suggest that CARB consider the proposed Tables provided below. We wanted to assure CARB that the phase-out dates we are proposing were determined after extensive consultation with equipment manufacturers, comprehensive reviews of available non-SF₆ GIE alternatives on the market, and

¹ The California Municipal Utilities Association (CMUA) is a statewide organization of local public agencies in California that provide electricity and water service to California consumers. CMUA membership includes publicly-owned electric utilities that operate electric distribution and transmission systems. In total, CMUA members provide approximately 25 percent of the electric load in California.

² The Northern California Power Agency (NCPA) is a nonprofit California joint powers agency established in 1968 to construct and operate renewable and low-emitting generating facilities and assist in meeting the wholesale energy needs of its 16 members: the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, and Ukiah, Plumas-Sierra Rural Electric Cooperative, Port of Oakland, San Francisco Bay Area Rapid Transit (BART), and Truckee Donner Public Utility District—collectively serving nearly 700,000 electric consumers in Central and Northern California.

³ The Southern California Public Power Authority (SCPPA) is a joint powers agency whose members include the cities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, and Vernon, and the Imperial Irrigation District. SCPPA Members collectively serve nearly five million people throughout Southern California. Each Member owns and operates a publicly-owned electric utility governed by a board of local officials who are directly accountable to their constituents.

feedback from our internal subject matter experts. Both as a group and individually, our utilities have dedicated many hours to examining the viability of the SF₆ phase-out. These proposed phase-out dates below reflect our timelines for acquiring, piloting, and testing non-SF₆ GIE alternatives to safely and reliably phase out SF₆ GIE.

We propose the following phase out schedule for SF₆ GIE:

Table 1. Phase-out Dates for Distribution-level SF₆ GIE

Configuration	Voltage (kV)	Short-circuit Current (kA)	CARB Phase-out Date	Utility Proposed Phase-out Date
Aboveground ¹	< 38	< 25	January 1, 2025	January 1, 2025
		≥ 25	January 1, 2025	January 1, 2025
	≥ 38	< 25	January 1, 2025	January 1, 2031
		≥ 25	January 1, 2025	January 1, 2031
Belowground	< 38	< 25	January 1, 2025	January 1, 2031
		≥ 25	January 1, 2025	January 1, 2031
	≥ 38	< 25	January 1, 2025	January 1, 2031
		≥ 25	January 1, 2025	January 1, 2031

¹ Aboveground distribution GIE includes pad-mounted or pole-mounted equipment

Table 2. Phase-out Dates for all other SF₆ GIE

Voltage (kV)	Short-circuit Current (kA)	CARB Phase-out Date	Utility Proposed Phase-out Date
≤ 72.5	< 63	January 1, 2025	January 1, 2025
72.5 < kV ≤ 145	< 63	January 1, 2025	January 1, 2025
72.5 < kV ≤ 145	≥ 63	January 1, 2025	January 1, 2029
145 < kV ≤ 245	All	January 1, 2029	January 1, 2033
> 245	All	January 1, 2031	January 1, 2036

The phase-out dates proposed here will allow California utilities to continue to safely provide reliable electric service while addressing our shared environmental goal to reduce GHG emissions. We would be happy to meet with CARB staff at any time to further elaborate on this matter.

As always, we appreciate the opportunity to comment on the August 15th Discussion Draft, and we look forward to the ongoing dialogue with CARB in the upcoming weeks.

Sincerely,



cc: Corporate Files (LEG 2019-0187)