



National Electrical Manufacturers Association

NYSDEC Office of Climate Change
625 Broadway
Albany, NY 12233-1030

February 27, 2024

Via email: climate.regs@dec.ny.gov

To Whom It May Concern,

The National Electrical Manufacturers Association (NEMA) SF₆ & Alternatives Coalition is pleased to submit feedback below to the New York Department of Environmental Conservation regarding proposed policies to regulate the use and emissions of sulfur hexafluoride (SF₆) by electric utilities. Please do not hesitate to reach out for further discussion or questions.

NEMA is the leading U.S. trade group representing electrical equipment manufacturers, which are at the forefront of electrical safety, reliability, and efficiency. Our 300+ member companies provide a range of products including energy storage and other technologies that comprise the power sector infrastructure. Collectively our membership provides some 370,000 American manufacturing jobs in more than 6,100 facilities, with worldwide industry sales exceeding \$140 billion.

NEMA's SF₆ & Alternatives Coalition is comprised of over 20 members who are producers and distributors of SF₆ and alternative insulating gases, manufacturers of insulated power grid equipment, electric utilities, and other industry stakeholders. Our mission is to provide a forum for public discussion of environmental concerns of SF₆ as a greenhouse gas and to educate public and private stakeholders on best practices and sustainable usage of insulating technologies as used in power grid equipment.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jonathan Stewart', written in a cursive style.

Jonathan Stewart
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§495-1.3

The below terms are used in several sections of the proposed rule but do not have a corresponding definition. NEMA proposes the following definitions for incorporation that align with the definitions used in the California Code of Regulations Title 17 §95351:

“Hermetically Sealed Gas-Insulated Equipment” or “Hermetically Sealed GIE” means GIE that are pre-charged with covered insulating gas, sealed at the factory, and designed by the manufacturer to not be fillable by the GIE owner or a third-party designee.

“Non-Hermetically Sealed Gas-Insulated Equipment” or “Non-Hermetically Sealed GIE” means GIE that contain a covered insulating gas and are designed by the manufacturer to be fillable by the GIE owner or a third-party designee.

§495-1.4 (b)

Table 1, below, presents the SF₆ phase-out dates for certain configurations of gas-insulated equipment (GIE). The ‘Aboveground’ categories indicate that GIE with voltage ratings up to 38 kV will be phased out as of January 1, 2024 with the phase-out for GIE at 38 kV commencing on January 1, 2028. However, the ‘Belowground’ configuration on indicates a phase-out for GIE with ratings up to but not including 38 kV. Given that the California regulation includes 38 kV for ‘Belowground’ it is unclear whether this was intentional. If not, NEMA proposes a corrected table below.

Similar to the above, the ‘Belowground’ configuration range for Short-Circuit Current Rating is not continuous, i.e., it includes ratings below 25 kA and above 25 kA but does not include 25 kA. A proposed correction is also included in the second table below.

Current

Configuration	Voltage Capacity (kV)	Short-Circuit Current Rating (kA)	Phase-Out Date
Aboveground	<38	All	January 1, 2026
	38	All	January 1, 2028
Belowground	<38	<25	January 1, 2026
		>25	January 1, 2031

Proposed Corrections

Configuration	Voltage Capacity (kV)	Short-Circuit Current Rating (kA)	Phase-Out Date
Aboveground	<38	All	January 1, 2026
	38	All	January 1, 2028
Belowground	≤38	<25	January 1, 2026
		≥25	January 1, 2031

§495-1.4 (c)

The Short-Circuit Current Rating ranges for both ‘38<kV≤145’ and ‘145<kV≤245’ voltage capacities are not continuous. To make the ranges continuous, NEMA proposes corrections in the second table below:

Current

Voltage Capacity (kV)	Short-Circuit Current Rating (kA)	Phase-Out Date
38<kV≤145	<63	January 1, 2026
	>63	January 1, 2028
145<kV≤245	<63	January 1, 2027
	>63	January 1, 2031
>245	All	January 1, 2033

Proposed Corrections

Voltage Capacity (kV)	Short-Circuit Current Rating (kA)	Phase-Out Date
38<kV≤145	<63	January 1, 2026
	≥63	January 1, 2028
145<kV≤245	<63	January 1, 2027
	≥63	January 1, 2031
>245	All	January 1, 2033

§495-1.5 (b)

“dk,j is the number of days during the first reporting year that GIE device k with covered insulating gas j was in active service.” However, “active service” is not defined elsewhere in the regulation and could reasonably be interpreted in different ways by different stakeholders. Accordingly, NEMA recommends avoiding its usage and, instead, re-write this section using “active GIE” which is defined in §491-1.3. NEMA proposes the following:

Proposed language:

“dk,j is the number of days during the first reporting year **for active** GIE device k with covered insulating gas j.”

In addition to the above instance, the term “active service” is used elsewhere in the proposed regulation (*see*, §495-1.6 and 1.10). NEMA recommends that DEC revise each to instead employ the term “active GIE” commensurate with definition provided.

§495-1.7 (b)

NEMA recommends clarifying the use specifically of GWP20 for converting GIE emissions into CO₂e. The regulation defines GWP20 but does not mandate its use.

Proposed language:

“GWP_j is the GWP20 of covered insulating gas j released during one or more emergency events;”

§495-1.10 (a) (1)

The proposed language allows GIE owners to submit an SF₆ phase-out exemption request beginning on September 1, 2026 – nine (9) months *after* the phase-out has taken effect. This overlooks the high likelihood that GIE owners will need to replace SF₆ equipment under circumstances that meet the requirements for a phase-out exemption during that time period. NEMA believes that this constitutes an unnecessary burden and, accordingly, recommends changing this date to September 1, 2025, which is four (4) months *before* the phase-out goes into effect. GIE owners typically plan equipment decommissioning months, if not years, in advance. Allowing them to submit exemption requests in the months leading up to the effective date will facilitate a smoother ramp-up to what could be dozens of exemption requests in the first year alone.

Proposed language:

“Beginning **September 1, 2025**, a GIE owner may submit an SF₆ phase-out exemption request...”

§495-1.10 (a) (1) (i)

The proposed language allows GIE owners to request an exemption from the phase-out when “non-SF₆ GIE of the equipment type and GIE characteristics necessary for the particular

project(s) or application(s) are unavailable from at least two suppliers.” NEMA recommends replacing “suppliers” with “original equipment manufacturers.” Supplier is a broad term that could include distributors and re-sellers as well as manufacturers. It is possible that, in response to one request for proposal, a distributor, a re-seller and a manufacturer all respond quoting the same piece of equipment. This could technically be considered three distinct applications or bids when, in reality, the GIE owner only has one option.

Proposed language:

“... non-SF₆ GIE of the equipment type and GIE characteristics necessary for the particular project(s) or application(s) are unavailable from at least two **original equipment manufacturers.**”

§495-2.5

NEMA does not see the benefit in registration, record-keeping or reporting of commercial transactions related to SF₆. The mere presence of SF₆ in the state does not pose a threat to the environment or climate change writ large. Nor does NEMA see how DEC could use the associated information to achieve its climate change goals. Rather, it is the release of SF₆ into the atmosphere which represents an environmental impact. NEMA recommends that this requirement be removed from the regulation. This recommendation notwithstanding, NEMA has provided comments on specific subsections below.

§495-2.5(b)(1)

The regulation requires that “...any person who manufactures for sale or entry into commerce in the State of New York products that contain a regulated substance must also provide...[a] list of all products that are intended to contain regulated substances and are applicable to the manufacturer.” NEMA recommends that “products” be defined to refer to general equipment categories such as: switchgear, circuit breaker, sectionalizer, recloser, or bus. Collectively, equipment manufacturers that sell into New York have tens of dozens of products within each of these categories. Having to report each of these products would result in a list of over 1000 model numbers that constantly evolves as new products are introduced and legacy products are retired. NEMA does not see how creation and maintenance of such an exhaustive, detailed list furthers the environmental objectives of this regulation.

§495-2.5(c)(1)(ii)

The regulation requires each supplier and reclaimer to submit an annual report detailing, among other items, the total quantity of regulated substances supplied to New York in the calendar year. While suppliers and reclaimers will have records of regulated substances sold directly into the State, they will not be able to track quantities of regulated substances produced by them but sold by distributors or re-sellers into the State. Accordingly, NEMA recommends revising the language as follows:

(ii) total statewide annual aggregated weight in pounds of each type of regulated substance sold, supplied, or distributed directly to a customer in New York State.

§495-2.5(d)(1) – (4)

The regulation requires suppliers and reclaimers to keep records dating back five (5) years of all transactions of regulated substances, including customers and contact information, invoices, supplier names and contact information, and facility names and contact information. The language does not provide any geographical limitations to this information, meaning that suppliers and reclaimers would be required to provide this information for all transactions of regulated substances as defined by NY DEC anywhere in the world. NEMA strongly recommends that geographical parameters be incorporated into this requirement that align with the NY DEC's jurisdiction i.e. the State of New York. As mentioned above, creating and maintaining such a list (i.e., all transactions, everywhere) offers no value in furtherance of DEC's environmental goals.