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To: Members of CARB's Electricity Transmission and Distribution Greenhouse Gas Emissions Working Group

Reference: Comments for Second Public Workshop on the Electricity Transmission and Distribution Greenhouse Gas Emissions

G&W is submitting the following comments regarding the draft document posted on February 22, 2019.

- 1. In Section 95351 (Definitions and Acronyms) the definition of "Non-Hermetically Sealed GIE" states it is not "designed to be gas-tight and sealed for the life of the equipment". This is not necessarily true. While it is agreed that GIE which is fillable by the user is not "Hermetically Sealed" as defined, the fill-valve does not directly equate to the GIE not being gas-tight or sealed for life. G&W requests that the definition be changed to either remove the reference to gas-tight and sealed for life, or to make the fillable portion primary with a note that "some" of these devices are not gas-tight or sealed for life.
- 2. Regarding Section 95352 (a)/ Table 1 (Sulfur Hexafluoride Phase Out), and the information presented in the February 25, 2019 public work shop regarding the cost impact of alternative equipment, G&W has questions/concerns which we plan to discuss with CARB employees.
- 3. G&W has noted a possible area of confusion regarding equipment returned to a supplier or 3rd party for return/inspection and/or repair.
 - a. The process of returning equipment to a manufacturer usually follows one of two paths. The first path includes the customer returning a product to the manufacturer for inspection and possible repair. Because the product is still owned by the customer, the manufacturer must provide a report and any applicable costs for the repair before proceeding. It is quite possible that during this time, the manufacturer would need to remove the SF₆ inside of the GIE. Any repair work performed would include new SF₆ being installed (along with an updated nameplate.) In this specific scenario, it is possible the manufacturer would be in possession of the GIE at the end of the reporting year and that the returned product would contain a different amount of SF₆.
 - i. Please confirm that Section 95352(a)(1)(A)2 which states "This provision does not apply to SF6 GIE purchased, transferred, sold, leased or offered for sale or lease that was present in the State and reported to CARB pursuant to section 95353(f) for a data year prior to the appropriate phase -out date listed in Table 1." allows for the return of product after the phase out date.
 - b. In the second path, the manufacturer provides a replacement product or reimburses the customer for the product and the product is returned to the manufacturer. In this case, the manufacturer would become responsible for the GIE and SF₆.
 - i. For this procedure, it does not appear that the draft document provides a technical exemption or allowance for the manufacturer to provide a replacement piece of GIE after the phase out date. G&W recommends adding a new provision in Section 95352(a)(1)(A) which allows the repair/replacement of defective GIE that was present in the state prior to the phase out date.
- 4. In Section 95352 (Sulfur Hexafluoride Phase Out) and in Section 95352.3 (Nameplate Capacity Labeling) the following terminology is utilized:
 - "no person may... transfer, sell, lease..."
 - a. It is not uncommon for manufacturers to ship product internationally using water-based transportation methods. As California is a coastal state, the use of international shipping ports in the state of California is standard practice. In some of these transactions, the commercial order terms use the shipping point as the transfer of ownership from the manufacturer to the end customer (who is usually located in a different country.)
 - b. G&W does not believe the intent of this verbiage is to prohibit shipment of GIE through the state of California, but it is believed the current language could be read in that manner. As such, G&W requests either the addition of specific definitions for "transfer" or a modification to the language.
 - c. If the intent of the verbiage is to prohibit shipment of GIE through the state of California, G&W requests that CARB include the lost revenue (to the ports of California) of these shipments within the cost impact calculation.

- 5. Section 95352 (Sulfur Hexafluoride Phase Out) specifically refers to the nature of importing GIE into California after the phase-out date(s). Item (2) in this section states that all GIE and gas containers must be clearly marked.
 - a. Is it a correct understanding that once the Phase Out dates have passed, that gas containers filled with SF₆ will still be allowed to be brought into California for maintenance and repair of existing GIE?
- 6. Section 95352.3 (Nameplate Capacity Labeling) requires that after a specific date, the nameplate capacity listed on the GIE must be accurate to within one pound of gas or one percent (whichever is greater). During the workshop of February 25, 2019, it was mentioned that this requirement is directed specifically to the users located within California.
 - a. As background information, G&W believes that users could request one of several different potential processes be used by manufacturers to provide this proof. For example:
 - i. Documentation showing that calibrated equipment is used which has an accuracy within the required amount.
 - ii. Documentation showing that a percentage of pieces of manufactured GIE have been shown with a secondary set of equipment to meet the accuracy requirement.
 - iii. Documentation showing that every piece of GIE has been shown with a secondary set of equipment to meet the accuracy requirement.
 - b. The manufacturing (and therefore equipment) cost increases that would come with utilizing secondary sets of equipment cause a fairly high level of concern for this process. And because each user could request a different method of "proving" the nameplate accuracy from the manufacturers, G&W requests that CARB include a specific or preferred method of proving the nameplate accuracy. Our recommendation would be the first item, "Documentation showing that calibrated equipment is used which has an accuracy within the required amount."
- 7. Section 95355.3 indicates the conditions in which a technical exemption may be made allowing the use of SF₆ GIE and in Section 95352, the manufacturer cannot "sell, lease, or offer for sale or lease" SF₆ GIE.
 - a. These two sections, when combined, have some potentially confusing items. For example, in Section 95355.3, manufacturers must provide bids to the potential owner so that they can prove non-SF₆ GIE are or are not available. This could be documented as an "offer for sale".
 - b. In addition, while Section 95352 allows for the owner to purchase equipment which has received a technical infeasibility exemption, the regulation does not document how a manufacturer will be made aware of this approved exemption. As a point of information, some potential owners use automated purchasing processes and require the manufacturers to have an automated acceptance policy/system. In these cases, the automated systems do not allow for a stop based on "acceptance" or for a type of equipment.
 - c. Finally, there are a number of non-utility owners of SF₆ GIE within the state of California. Some of these owners utilize non-direct to manufacturer purchasing means such as distributors and contractors. These distributors and contractors may not be located in the state of California and may therefore be unaware of the regulation or need to notify the manufacturer of equipment being sold into California.
 - d. With these points in mind, G&W recommends that the regulation clearly state that it is the owner's responsibility to confirm receipt of the exemption approval prior to issuing a purchase order.

We welcome questions and discussion on these comments,

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