



Date: June 10, 2019

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

Comments in reference to:

Draft Amendments to the Regulation for Reducing Sulfur Hexafluoride (SF6) Emissions from Gas Insulated Switchgear, Feb 25, 2019 Workshop.

DILO is formally submitting this letter in response to the draft amendments strawman that is being reviewed regarding Regulation for Reducing Sulfur Hexafluoride (SF6) Emissions from Gas Insulated Switchgear.

### **Definition Gas Cart**

DILO requests that the review board consider amending the use of the phrase "gas carts" as a "gas container." Gas carts are used to fill and evacuate GIE and cylinders with gas; they are not intended to store gas long-term.

Cylinders which may be installed on a gas cart cylinder rack system are removable and do fall under a gas container definition. These cylinders can be removed and weighed. We propose the regulation clarify that any removable cylinders should be weighed independent of the gas cart for accountability of any gas stored in the cylinders.

Additionally, we request that the board consider the following point in regard to fixed tanks on a gas cart. A gas cart that may contain a fixed temporary storage tank is not to be used as a long-term storage tank. Any application where a fixed tank is installed on a gas cart, we propose the regulation clarify that gas stored in a fixed container on a gas cart must be emptied into individual cylinders for the purpose of gas weight accountability.

Further we propose the regulation exclude any language which requires a reporting entity to weigh a gas cart. The only way to weigh a gas cart would be to put the entire cart on a large scale. Large carts can often weigh 2,800lbs to 4500lbs; reporting entities do not typically own scales large enough and accurate enough to accommodate this. The manufacturers of gas carts provide users instructions and recommendations on how to empty gas carts of gas into storage cylinders and not use on board cylinders or fixed tanks as long-term storage.

Short term storage, as defined by DILO is as follows:

- Gas storage during maintenance, or any service activity of a GIE.
- The gas would be either re-introduced into the GIE as part of the scope or put into cylinders for further action (i.e. long-term storage, sent out to recondition/recycle or returned to a supplier).
- The temp storage cylinder will be emptied of all gas product upon completion of any gas handling activity



### **Nameplate capacity and correction**

DILO requests that the review board further consider as part of the regulation draft the clarification that nameplate capacity corrections must be on the responsibility of the GIE owner and at their discretion.

The nameplate capacity should be confirmed via the process for filling from vacuum (blank-off pressure) or by following the proposed nameplate capacity calculation method as proposed by NEMA SF6 Coalition for nameplate adjustments. The regulation should enforce that a calibrated scale or a mass flow meter be used in either application to fill, recover and account for gas handled.

Further to the specific regulation change, DILO requests that CARB consider the requirement to notify CARB of a pending nameplate adjustment with 7 days be removed from the draft regulation. DILO would like to propose that the regulation allow the GIE owner to notify CARB of a nameplate change with the appropriate back up of data based on a defined CARB designated template that follows the set processes to determine nameplate SF6 gas quantity and the use of calibrated mass flow meter and cylinder scales.

Finally, DILO wishes to recommend to the board to remove the requirement to affix a permanent nameplate SF6 gas quantity to a GIE that is to be scrapped or disposed of and no longer be placed as "active."

### **Phase Out schedule**

DILO supports the move towards reduced GWP solutions. DILO is prepared to support the industry as these solutions are launched into full use for the designed applications. However, it is unclear if the process and time frame to reach 100% compatibility of alternative solutions will meet the same level of performance of SF6 gas across all voltages and current ratings per the proposed phase out dates.

DILO would like to request the board consider requiring users of SF6 gas that have requirements for GIE with ratings not yet confirmed to be covered by the alternative solutions, to utilize reconditioned SF6 gas currently in the USA. This will reduce the overall global emissions that are emitted from production of virgin SF6 gas. The requirements will be that the SF6 gas meet the CIGRE and IEC standards set in place. And that zero emission handling practices be used by trained and qualified technicians (internal to their organization or 3<sup>rd</sup> party technicians). Essentially if the user documents that reconditioned SF6 gas is used, they are contributing to reduced global emissions.

DILO appreciates the opportunity to provide these comments for consideration. We propose that the board allow a scheduled meeting to further discuss these points and any other considerations that the board may be considering and may require further information that DILO can offer.

Regards,

A handwritten signature in black ink, appearing to read "Billy Law".

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