April 26, 2019

Mary Jane Coombs
California Air Resources Board
1001 "I" Street
Sacramento, CA 95814

Filed electronically

RE: WPTF Supplemental Comments on February 22, 2019 Discussion Draft of Potential Changes to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

Dear Ms. Coombs,

The Western Power Trading Forum ("WPTF") provides the following supplemental comments on the Discussion Draft referenced above. WPTF is a broad-based organization of companies that advocate for competitive market rules throughout the Western Interconnection. WPTF's interest in the Discussion Draft primarily relates to how the Discussion Draft would affect independent power producers ("IPPs"). IPPs use SF_6 Gas Insulated Equipment ("GIE") in the switchgear applications of power plants in California. Since nearly all power plants use SF_6, the existing SF_6 Regulation and the Discussion Draft could affect all technology types.

These comments supplement our March 10, 2019 comments and focus on three issues: (1) the ARB should set a baseline nameplate capacity year at the first year of each of the phase out years; (2) the ARB should establish an explicit cost threshold for the technical feasibility exemption; and (3) the ARB should set the de-minimis threshold at 10,000 $MTCO_2(e)$, under which the phase out schedule would not apply. To ensure the environmental integrity of the Regulation, the ARB should still require reporting by sources below the proposed de-minimis threshold.

DISCUSSION

I. Nameplate Capacity Determinations

The ARB should establish the nameplate baseline consistent with the phase-out schedule. WPTF is concerned that the Discussion Draft would restrict the ability of generators to undertake routine maintenance, including the replacement of SF_6 breakers with like-for-like prior to the phase out deadlines. The already strict 1% emissions limit would become even more stringent with any additional SF_6 capacity that is added after 2019. Under the current regulation, a single release of SF_6, can put an entity over the emissions limit, and the 2019 baseline year would make that standard even more strict for some companies.

To address this concern, the ARB should revise the Discussion Draft to establish the baseline by voltage class. The baseline should be established based on reported data for the first year for each of the phase out deadlines. In other words, the baseline for 145kV and below would be set in 2025, the baseline for 145 kV – 245 kV would be set in 2029 and the baseline for 245 kV and above would be set in 2031. In making this change, the ARB would ensure that any additional SF_6 capacity is still subject to a strict 1% emissions limit.

In addition, the ARB should reevaluate the process for establishing the nameplate capacity. WPTF is concerned that the process specified in Section 95355.2 (particularly, the evacuation of SF_6) could pose new risks of release. Instead, the ARB should evaluate compliance with the emissions limit as it does under the current Regulation (i.e., based on changes in weight of cylinders and measuring how much SF_6 is added to active GIE).

II. Technical Infeasibility Exemption and Cost

WPTF is concerned that the ARB is establishing a phase out obligation before the technology pathway for alternatives to SF_6 has been clearly established (particularly at the high voltage levels). While WPTF appreciates the ARB's desire to address all forms of GHG emissions, the ARB should also account for cost and the likelihood of emissions. The 1% emissions standard sets a very high bar that most operators are already managing to and taking all steps possible to minimize the risks of emissions. The ARB should consider these relative risks and quantities of emissions as a policy rationale for allowing regulated entities to seek a Technical Infeasibility exemption based solely on the potential cost of an SF_6 alternative. Our concern is that an SF_6 alternative may be technically feasible in the future but render an IPP who is dependent on recouping its capital costs from competitive power markets uneconomic if the cost is too high.

To address this concern, the ARB should establish an explicit cost threshold available to regulated entities seeking the infeasibility exemption. As one possible option, the ARB could look to the cap-and-trade price ceiling structure as a model (i.e., a $/$MTCO_2$(e) cost cap). The ARB would multiply this "cost cap" by the total emissions sought to be exempted as infeasible – e.g., 1,000 $MTCO_2$(e) of capacity x $90 cost cap = $90,000. If the bid price for the SF_6 alternative is greater than $90,000 to be fully installed for each individual replacement, then the infeasibility exemption would apply.

In addition to a cost exemption, the ARB should establish a process for emergency approvals of the technical infeasibility exemption. Some parts in the power sector can have extensive lead times and it may be that in order to continue to make a power plant available to the CAISO or another balancing authority for dispatch, the part must be replaced quickly. IPPs can face severe penalties in the event that they are unavailable outside pre-approved maintenance and outage windows. As a result, there is a need for expeditious approvals and the technical infeasibility exemption should explicitly include the feasibility of installing an alternative technology within a certain timeframe.

III. De-Minimis Threshold

The current SF_6 regulation applies very differently to similar SF_6 releases depending on how many facilities the regulated entity operates. For a company that owns only one facility subject to the SF_6 regulation, the 1.0% emission limitation may be difficult to adhere to, even after implementing best practices for maintenance and handling of switchgear and adhering to manufacturer recommendations. On the other hand, for a large T&D operator with a multitude of facilities using SF_6 in switchgear applications, a single release will not likely create a compliance issue. The standard will continue to tighten as the 1% threshold drops to .5% in the future.

The ARB should maintain consistency with other ARB GHG regulations by setting a 10,000 $MTCO_2$(e) applicability threshold. The proposal for a 5,500 MT CO_2e applicability threshold is arbitrary. A 10,000 $MTCO_2$(e) threshold would be consistent with the applicability threshold in the Mandatory Reporting Regulation for Greenhouse Gas Emissions. This change would reduce the administrative requirements and compliance costs for entities with only a few GIE. Entities below the 10,000 $MTCO_2$(e) threshold represent a small percentage of the total statewide SF_6 inventory, and their exclusion should not materially affect the environmental performance of the SF_6 Regulation. Entities below this proposed

threshold may lack the ability to recover replacement costs from the competitive power markets. If the ARB makes this change, the ARB should continue to require reporting by GIE owners. However, the phase out schedule should not apply to facilities that fall below the exemption threshold.

Similarly, the ARB should exempt hermetically-sealed SF_6 GIE from the phase-out schedule. Manufacturers design and build hermetically-sealed SF_6 GIE to be "sealed for life" with no routine maintenance or in-the-field refilling required. Hermetically sealed GIE is typically newer vintage equipment. These proposed exemptions would not affect the environmental performance of the Regulation, and WPTF therefore believes that it is appropriate to exclude this class of equipment from the emissions leakage determinations and phase-out schedule.

Conclusion

WPTF appreciates the opportunity to engage with the ARB staff on the rulemaking design before the formal rulemaking begins. WPTF looks forward to working with the ARB to ensure that the economic, reliability, and competitiveness implications of this Regulation are fully evaluated and addressed in the final regulatory design.

Sincerely,

/s/

Scott Miller
Executive Director
Western Power Trading Forum