

February 22, 2010

VIA ELECTRONIC MAIL

Clerk of the Board
California Air Resources Board
1001 I Street,
Sacramento, California 95814

Re: Comments of PacifiCorp regarding “Proposed Regulatory Language Subarticle 4. Gas Insulated Switchgear”, dated January 7, 2010.

Dear Ms. Garcia:

I am writing to you on behalf of PacifiCorp to provide you with comments in response to the California Air Resources Board’s (“CARB”) “Proposed Regulatory Language Subarticle 4. Gas Insulated Switchgear”, dated January 7, 2010.

I. Introduction

PacifiCorp is a regulated multi-jurisdictional utility serving 1.7 million retail electricity customers, in Utah, Oregon, Wyoming, Washington, Idaho and California. PacifiCorp owns, or has interests in, 74 thermal, hydroelectric, wind-powered and geothermal generating facilities, with a net owned capacity of 10,188 megawatts. PacifiCorp also owns, or has interests in, electric transmission and distribution assets, and transmits electricity through approximately 15,800 miles of transmission lines.

PacifiCorp maintains a transmission and distribution system in Northern California and is the Balancing Authority for the areas known as PacifiCorp West and PacifiCorp East.¹ PacifiCorp is also a member of the U.S. Environmental Protection Agency Sulfur Hexafluoride (“SF₆”) Emission Reduction Partnership. As a member, PacifiCorp is committed to tracking and reducing SF₆ emissions.

PacifiCorp has adopted the following SF₆ policies and procedures:

- “SF₆ Gas Tracking and Reporting Policy (Policy SOP-POL- 015)”;
- “SF₆ Handling Procedures (Procedure SP-SF6-HNDL)”;
- “SF₆ Gas Filling Procedure (SP-SF6-FILL)”;

¹ The Balancing Authority is the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time. A Balancing Authority is defined as the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time. A Balancing Authority Area is defined as the collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load resource balance within this area.

- “SF₆ Gas Sampling Procedure (SP-SF6-SMPL)”

PacifiCorp provided electronic copies of these policy and procedures via e-mail to CARB staff on September 16, 2009.

II. General Comments on Draft Regulation

§ 95350(b) Applicability.

- Recommend a revised applicability to “... owners of *active* gas insulated switchgear *that totals over 5,000 pounds of nameplate capacity.*” This would effectively exempt small utilities, including PacifiCorp, from the rule.

§ 95351. Definitions

- The draft rule does not define “low-voltage” electrical circuit breakers. It is implied in the material that low voltage is 70kV or below. If that is the case it should be clarified to be circuit breakers rated at 70kv or below, not the actual operating voltage. We currently use 72.5kV rated SF₆ circuit breakers for our 69kV and 46kV system. We are not aware of any vacuum circuit breakers commercially available for use by 69kV or 46kV systems.

§ 95351 (6) “Gas-insulated switchgear or GIS”

- Recommend revising the definition of GIS to mean “... all electrical power equipment that is insulated with SF₆ gas *and hermetically sealed* regardless of location.” The hermetically sealed wording is used on “active GIS equipment” and should be used here as well.

§ 95352. Maximum Annual SF₆ Emission Rate

- A maximum annual SF₆ emission rate of 1% or 2% is unrealistic and possibly even beyond the available seal technology and operational characteristics of the equipment. The current average annual emission rate for utilities enrolled in the U.S. Environmental Protection Agency SF₆ Reduction partnership is around 6% and many utilities have been working toward this goal for many years.
- A maximum annual SF₆ emission rate of 1% by 2020 may also not be achievable because while new equipment sold by vendors may initially have a guaranteed leakage rate at this level, as equipment ages, leaks tend to increase and manufacturer warranties do not apply.
- A 1% SF₆ emission rate is beyond the inherent accuracy of the current measuring systems used to track emissions. PacifiCorp currently has about 1,800 pounds of SF₆ gas in use within California ~ 1% is equivalent to 18 pounds which is about 1/6th of a cylinder. Trying to manage an inventory to that level is unrealistic. – if a single cylinder is unaccounted for or misplaced within PacifiCorp’s inventory, we would exceed the target emissions rate and considered non-compliant.

- Also any small operational issue or small loss of gas during maintenance may push an entity over the annual emissions rate threshold. If one 230kV circuit breaker has a very slow leak, it is possible that no leakage would be reported in a year but twenty pounds of SF₆ would be refilled the next year which, given our low inventory, would trigger a violation. The only alternative would be to constantly refill any slow leakers - creating an unnecessary risk of a loss of SF₆ gas during refilling operations. PacifiCorp request that the rule identify an alternative "maximum" annual emissions amount expressed in pounds – perhaps 100 pounds – that regulated entities with very low inventories of SF₆ are subjected to rather than a percentage. In the alternative, CARB should expand a list of exemptions to the rule requirements based on “emergency events” that will allow more venting of SF₆ without penalty.

§ 95353: Emergency Event Exemption

- Recommend the emergency event exemption commence in 2011, not 2020. This gives owners time to replace or repair leaking equipment and reflects the phase in time associated with the maximum annual emissions.

§ 95355: Recordkeeping

- Under the inventory requirements, specifically subsection (a)(3), the seal type (hermetic or non-hermetic) is irrelevant since non-hermetically sealed equipment is not utilized in the emissions calculations.
- Under the inventory requirements, specifically subsection (a)(5), the date of manufacture of the equipment does not seem to be relevant and may be difficult to obtain other than in general terms.
- Similarly, the inventory requirements, specifically subsection (a)(9)(B), requiring the date and disposition of equipment removed and no longer in inventory does not seem relevant. It implies that records of SF₆ equipment removed need to be permanently maintained. PacifiCorp sees no reason or value to do so and actually maintaining this information may be difficult to do other than in general terms.

§ 95356: Annual Reporting Requirements

- As noted above, PacifiCorp is a multi-jurisdictional utility with approximately 46,500 of its 1.7 million customers located in northern California. Approximately 35% of these customers are considered low-income and participate in PacifiCorp’s California Alternative Rates for Energy (“CARE”) assistance program. As such, the Company is particularly sensitive about keeping costs as low as possible while continuing to provide safe and reliable electric service. To achieve these goals, PacifiCorp recommends that the design, implementation, reporting, and enforcement of the rule should allow for flexibility with respect to small and multi-jurisdictional utilities, with the objective of balancing benefits with the potentially high costs of compliance.

- PacifiCorp is currently following most of the draft rule's reporting requirements; however, calculating precise SF₆ emissions for just the state of California service territory may require unnecessary and costly process changes. Currently our crews in Medford, Oregon service our Northern California equipment. As a result, a single SF₆ cylinder used to service both Oregon and California equipment, at least within the California recordkeeping, may appear to have unaccounted for SF₆. PacifiCorp suggests that language within the rule acknowledge the unique circumstances of small and multi-jurisdictional utilities by allowing additional reporting flexibility.

§ 95358: Enforcement

- Penalties for noncompliance could prove excessive, and not commensurate with the violations. This potential is heightened by CARB's effort to align its current "daily penalty" scheme with an annual compliance obligation regulation.
- California has a wide range of potential remedies to address noncompliance. PacifiCorp suggests mitigating circumstances, such as delays in scheduling repairs due to electricity system reliability concerns, should also be expressly identified within this section of the rule.

Summary

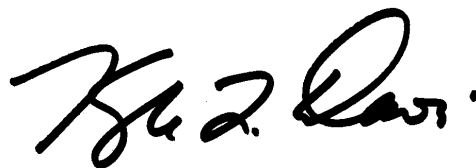
In summary, PacifiCorp appreciates the opportunity to provide information comments on the draft SF₆ rule. Multi-jurisdictional utilities have unique reporting and record keeping challenges. The rule should acknowledge these circumstances and adjust or provide staff with the flexibility to adjust the rule requirements as warranted.

Thank you for your consideration of these comments.

Dated: February 22, 2010

Respectfully submitted,

By



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