310 CMR 7.72: Reducing Sulfur Hexafluoride Emissions from Gas-Insulated Switchgear

Overview

In April 2014, the Massachusetts Department of Environmental Protection finalized emissions requirements for gas-insulated switchgear (GIS). All new GIS equipment was required to demonstrate a maximum annual sulfur hexafluoride (SF₆) leak rate of 1%, and system-wide maximum leak rates were imposed on the large utilities (Eversource and National Grid), declining to 1% in 2020. On August 11, 2017, MassDEP published amendments to 310 CMR 7.72 to include mass-based limits that decline annually in conjunction with the existing maximum leak rates. Adding mass-based limits prevents increases in SF₆ emissions that could otherwise occur due to deployment of additional GIS equipment, and retaining the leak rate requirement maintains the stringency of the existing program.

Requirements

• SF₆ emissions from active GIS owned by large utilities must meet a mass-based, annually declining aggregate limit;
• SF₆ leak rate requirements and the maximum leak requirements for new equipment are retained.

Changes to the Proposal

In response to public comment on the proposed regulation, the final regulation includes the following changes:

• A revision to the emission limit for Eversource in light of new data about anticipated and planned system upgrades in the Boston area;
• Clarifications to the emergency event exemption language to ensure that MassDEP has the appropriate discretion regarding exemptions;
• Clarification of the definition of “federal reporting GIS owner” to ensure consistency within the universe of regulated entities over time.