Comments of NextEra Energy Resources[1] to the California Air Resource Board in Response to the Proposed Regulation of Sulfur Hexaflouride in Insulated Switchgear

NextEra Energy Resources (NextEra Energy) is a leading clean energy provider with over 18,000 MW of natural gas, wind, solar, hydroelectric and nuclear power plants in operation in 26 states and Canada. More than 90 percent of NextEra Energy's electricity is generated by clean fuels. In addition, NextEra Energy is an affiliate of a regulated utility, Florida Power & Light Company, located in southern Florida. Florida Power and Light provides services to approximately 4.5 million customer accounts[2], owns and operates over 24,000 MWs of electric generating capacity, and maintains over 73,000 miles of transmission and distribution power lines and 580 substations[3]. In California, NextEra Energy affiliates own and/or operate 700 MWs of wind, 310 MWs of concentrated solar thermal, 500 MW of combined cycle natural gas, and 44 MWs of coal generating capacity. We have many years of experience working with SF_6 insulated switchgear and appreciate the opportunity to comment on this proposed rule. It is also important to note that Florida Power and Light participated in EPA's Voluntary SF_6 Emissions Reduction Partnership for Electric Power Systems. In addition, the parent company of both affiliates, FPL Group, provided comments to EPA involving the management of SF_6 during their ongoing development of mandatory Greenhouse Gas (GHG) reporting requirements.[4]

The California Air Resources Board (ARB) has identified a desire to regulate the emissions of SF_6 into the atmosphere. SF_6 does have a relatively higher global warming potential (GWP) coefficient as compared to the radiative properties of CO_2. Of all the types of equipment that contains SF_6 gas, ARB has chosen to focus primarily on gas insulated switchgear (GIS). NextEra Energy would like to urge ARB to structure their regulations related to SF_6 GIS in such a way that accomplishes the goals of both the agency and AB32[5] without causing unnecessary burden on entities that incur this new

[1] NextEra Energy Resources, LLC and its affiliates FPL Group, Inc., Florida Power & Light Company, FPL Group Capital, Inc., each have subsidiaries and other affiliates with names that include FPL and NextEra Energy Resources, NextEra and similar references. For convenience and simplicity, NextEra, FPL Group, FPL and FPL Group Capital, as well as terms like Corporation, Company, our, we and its, are sometimes used as abbreviated references to specific subsidiaries, affiliates or groups of subsidiaries or affiliates. The precise meaning depends on the context.

[2] FPL Group Annual Report, 2008

[3] *Ibid*

[4] Proposed Mandatory Reporting of Greenhouse Gases, Docket ID No. EPA-HQ-OAR-2008-0508

[5] California Global Warming Solutions Act of 2006

compliance obligation. The following comments involve items which NextEra Energy feels could help reduce this burden without compromising the effectiveness of the program.

These comments focus on three main points:

- ARB should avoid overly prescriptive procedural requirements that are unnecessary and cause excessive and unwarranted cost to entities incurring a compliance obligation

- ARB should establish an applicability threshold for the equipment regulated under this proposed regulation

- If penalties are deemed necessary, ARB should structure the penalty matrix so it is in agreement with monitoring schedules

ARB's Proposed Monitoring Requirements Are Unnecessarily Burdensome

§ 95354 ***SF_6 Inventory Measurement Procedures*** (a)(2) would require the reporter to "Weigh all gas containers on a scale that is certified to be accurate to within one percent of the true weight". NextEra Energy understands that this would require facilities to purchase and maintain numerous high accuracy scales, which would have to be placed at each site where SF_6 cylinders are stored. This requirement would cause reporting facilities to incur significant costs to monitor relatively de minimis amounts of GHG emissions. NextEra Energy believes that SF_6 cylinders could be effectively monitored by using less costly monitoring techniques. For example, ARB could require reporting of SF_6 stored in containers at the beginning of the year, SF_6 sales and purchases, SF_6 sent off site for destruction, and SF_6 sent for and returned from recycling. The initial measurement of SF_6 stored in containers combined with the submission of records tracking subsequent SF_6 transactions would provide a sufficient means for monitoring SF_6 emissions without requiring the weighing of all SF_6 cylinders as they leave and enter storage. This mass balance approach was used effectively in EPA's Voluntary SF_6 Partnership Program and is a sufficient method of measurement for the purposes of this proposed regulation. Requiring GIS owners to keep certified scales at each storage location and weighing bottles before and after each use in our opinion is unnecessary.

Small, Sealed Equipment Should be Exempted from Reporting Requirements

In the current version of the proposed regulation it appears that any GIS owner that is in possession of SF_6 containing switchgear would be required to report all equipment regardless of size. NextEra Energy requests ARB establish a de minimis exemption for small SF_6 equipment that is sealed, similar to the exemption that exists for

partners in the EPA Voluntary SF_6 Partnership Program. Sealed equipment is not designed for refill and is instead replaced when no longer functioning properly. Equipment that doesn't function properly is replaced. ARB should focus on larger equipment that has the potential to leak and can be repaired, not on equipment that for one reason or another fails to operate correctly. Entities with this smaller sealed equipment would not have any control over their leakage rates and would potentially be exposed to enforcement liability based on a failure rate. An entity that follows all the manufacturers recommended maintenance procedures, promptly replaces failed equipment, and properly disposes of failed equipment should not be exposed to a potential compliance penalty. The owners of this type of equipment would in essence have not control over their compliance record or status. NextEra recommends that small sources (containing less than 15 lbs of SF_6) not be included in the reporting inventory or included in the calculation of leakage rates.

In addition, the administrative burden involved in keeping a separate running inventory for this small equipment is an unnecessary burden on GIS owners. Small equipment such as breakers or fuses could contain small amounts of SF_6 gas. Without an applicability threshold, entities would potentially have to track and monitor the movement of every breaker. The tracking of this smaller equipment is unnecessary and potential benefit to the reduction of GHG emissions would be relatively insignificant.

Establish Periodic Monitoring Requirement for Larger Equipment and Limit

Next Era Energy feels ARB needs to further address § 95358 (c) which states, "Any exceedance of the maximum allowable SF_6 emission rate for a calendar year shall constitute a single, separate violation of this subarticle for each day of the calendar year." That a facility could receive 365 separate violations for an exceedance of an allowable annual leakage rate is extreme and unnecessary. A leak is one event and if any penalty is necessary it should be treated as one event. There are several potential remedies that could both accomplish the goals of ARB and not place an excessive penalty on the entity that incurs the penalty. The ARB could structure penalties according to the volume of gas released and not on a 365x multiplier. If a leak is discovered and fixed, there is a release. If a facility acts prudently and in a timely manner they would still be penalized in a similar manner to a facility that just ignored the leak until the end of the year. A piece of equipment that leaked one day prior to the end of the year should not be treated the same as a piece of equipment that for an entire year. The leakage rate limit is based on an annual rate and the penalty should be scaled according to the measurement of compliance. To penalize a facility with 365 separate violations for what was probably a limited or isolated event is in our opinion neither prudent of justifiable. It appears ARB is implying a facility operator could knowingly ignore any leaks they discover for the balance of a calendar year. The replacement cost alone for SF_6 gas strongly discourages facilities from ignoring any leak not to mention leaking equipment could result in damaging very expensive equipment. If penalties are deemed necessary, ARB needs to

adjust the proposed penalty to appropriately match monitoring and compliance requirements.

NextEra Energy urges ARB construct the SF_6 GIS regulations in a way that accomplishes the goals set forth by the agency. In order to construct the regulation in a manner that "achieves the maximum technologically feasible and cost effective greenhouse gas reductions from sources and source categories"[6], NextEra Energy feels ARB must:

- Eliminate the need for entities to log and weigh of SF_6 cylinders upon entering and leaving storage
- Eliminate the need for scales to be kept at each storage location
- Eliminate the annual certification requirement for scales
- Employ the mass balance method of measurement similar to the one used in EPA's Voluntary SF_6 Emissions Reduction Partnership for Electric Power Systems
- Set applicability threshold at equipment containing greater than 15lbs of SF_6
- Adjust the penalty from a 365X multiplier to be based on either volume or some other metric

NextEra Energy looks forward to answering any question you may have related to these comments or other any other related issues. Please feel free to contact me at 561-691-7358.

Thank You

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[6] Proposed Regulation for Reducing Sulfur Hexaflouride Emissions from Gas Insulated Switchgear, Staff Report: Initial Statement of Reason, January 7, 2010, Page 4.