

## REQUESTS FOR ADDITIONAL INFORMATION

Point Beach Nuclear Plant, Units 1 and 2

License Amendment Request (LAR) dated January 27, 2010

Diesel Fuel Oil Storage Requirements

(TAC Nos. ME3282 and ME3283)

The following requests for additional information are associated with the NRC staff review of the LAR associated with diesel fuel oil storage requirements.

1. The Nuclear Regulatory Commission Staff has reviewed past correspondence related to the licensing basis for emergency diesel generator (EDG) fuel oil requirements. The staff considers that the onsite fuel oil storage shall be sufficient to operate the diesel generator following any design basis event for seven days. The current license amendment request (264) addresses the most limiting condition of operation of two EDGs operating for 48 hours versus one EDG operating for 48 hours.

Please provide a detailed discussion explaining why the seven day fuel requirement, as discussed in the licensing basis documents, is not factored into the TS controlled bounding fuel oil volume requirements.

2. The following questions are related to information provided in response to request for additional information related to extended power uprate and EDG loading/fuel oil consumption, (License Amendment Request 261) NextEra letter dated September 25, 2009 (ADAMS # ML092750395):

Enclosure 8 has the following statement related to the fuel oil consumption calculation:

“Revision 5 includes the following changes: (1) Removes the 10% margin identified for the T-176A and T-1 76B day tank capacity determination. This margin was provided for initial tank sizing and is not applicable to subsequent capacity evaluations; (2) Clarifies the basis for the High Heating Value to be used for Ultra Low Sulfur Diesel and recalculates fuel consumption rate at PBNP fuel conditions to address A/R 0114489; (3) Removes the conservatism in the temperature correction used for the fuel oil consumption rate determination.”

- a) Industry Standard ANSI/ANS-59.51-1997 “Fuel Oil System For Safety-Related Emergency Diesel Generators” (previously ANSI N195-1976), as endorsed by Regulatory Guide 1.137, Section 5.5.1, states that each diesel shall have a day tank with sufficient capacity to maintain at least 60 minutes of operation and that this capacity shall assume the fuel consumption with the diesel running at 100% continuous rated plus a minimum additional margin of 10%. This requirement is under component performance requirements.
  - i) Please provide an explanation as to why this requirement is being deleted from your calculation.

ii) The calculation uses the load dependant method of calculating the fuel oil storage requirements. Please clarify if the 10% margin has been removed from the fuel oil storage required on site for seven day operation of EDGs.

iii) Provide details on the changes associated with the consumption rate related to Ultra Low Sulfur fuel at the bounding density allowable by Technical Specifications.

b) Please verify that the Appendix R related fuel oil requirements with spurious accident signal actuations associated with EDG(s) operation or Gas Turbine operation is not the bounding case for fuel oil storage requirements.

c) Assumption 17 states that fuel oil consumption rate at 2951kW is equal to that at 2848kW.

Please provide supporting documentation. Provide details on the method used to evaluate fuel oil consumption at different EDG loadings during a seven day operation.

d) Assumption 18 states that the average loading of the EDGs over a seven day period is used for fuel oil consumption. The justification provided in assumption 20 is based on a future rebuild of a service water pump.

Please provide details on the current load profile of EDG(s) loading and fuel oil consumption for current plant design using actual loading over a seven day period.

e) Several tanks are credited for fuel oil storage requirements.

Please provide details on procedures used to verify the flow paths from each tank dedicated to the corresponding EDG for demonstration of storage capacity.

f) The latest revision of the calculation imposes a restriction on the BTU/pound for fuel oil receipt.

Please provide details on the actual value of BTU/pound used in the calculation and the method used to convert BTUs to gallons per kW/hr. Provide data on the BTU content of the fuel oil currently available in the storage tanks.