NUCLEAR ENERGY INSTITUTE

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Ms. Cindy K. Bladey
Chief, Rules, Announcements, and Directives Branch
Office of Administration
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Comments on Draft Regulatory Guide DG-1282, "Fuel Oil Systems for Emergency Power Supplies" Docket ID NRC-2012-0159

Project Number: 689

Dear Ms. Bladey:

The NRC, through *Federal Register* notice 77 FR 39745, issued for public comment draft Regulatory Guide DG-1282, "Fuel Oil Systems for Emergency Power Supplies." The Nuclear Energy Institute (NEI)[1] appreciates the opportunity to submit the attached comments for NRC consideration.

The draft regulatory guide describes methods that are acceptable to the NRC staff for compliance with requirements regarding fuel oil systems for safety-related emergency diesel generators and oil-fueled gas turbine generators. This proposed revision 2 of Regulatory Guide 1.137 endorses portions of ANSI/ANS 59.51-1997 and provides regulatory guidance on contemporary practices and related standards.

The attached comments address several issues. These include the impact of changes to the 7-day useable volume calculation, the need for additional guidance related to the performance attributes of fuel tank internal coatings, the need for reference standards for fungus, bacteria, and particulate testing, and the potential that fuel purchased to currently endorsed standards may contain unacceptable quantities of biodiesel fuel.

[1] NEI is the organization responsible for establishing unified nuclear industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all utilities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel fabrication facilities, materials licensees, and other organizations and individuals involved in the nuclear energy industry.

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NEI requests an opportunity to discuss the manner in which public comments are addressed prior to the finalization of the regulatory guide. If you have any questions or require additional information, please contact me at 202-739-8106, mar@nei.org.

Sincerely,

Mark A. Richter

Mark A. Richter

Attachment

ATTACHMENT

Comments on Draft Regulatory Guide (DG-1282) Fuel Oil Systems for Emergency Power Supplies

ID	Section, Page, and Line #	Comment	Proposed Resolution
1	C5.1 Page 4	This section precludes facilities from taking credit for the useable volume within the day (or integral) tanks on the emergency diesel generators (EDG) when calculating the 7-day useable volume. Some plants currently take credit for their day tank volumes, and disallowing this practice could potentially require a facility to install additional storage volume in order to meet the requirements of the draft RG. Given the lower heat content of ultra-low sulfur diesel (ULSD) fuel, all nuclear facility storage volume margins were reduced by transitioning to ULSD. As a result, some facilities included the day tank storage volume to avoid adding additional storage tank capacity. The previous revision of RG 1.137 did not preclude use of day tanks in the 7-day useable volume calculation.	Revise C5.1 so that it does not preclude use of day (or integral) tank volumes in the 7-day useable volume calculation, or provide a basis for this additional requirement.
2	C9.1 page 5	This section addresses protection against internal and external corrosion by use of coatings and/or cathodic protection, as appropriate. Guidance is provided for internal coating performance. The section does not provide guidance for needed actions for internally coated tanks that may not meet the recommended coating performance criteria.	Revise C9.1 to include guidance for addressing internally coated tanks that may not meet the recommended coating performance criteria.
3	C13.8 Page 8	This section addresses monitoring of the on-hand fuel supply to ensure reliability and availability of the fuel oil system. Included is a recommendation for taking biological cultures to assess the presence of fungus and bacteria. No standard or technique is specified for taking the cultures. This section also does not provide guidance for particulate contamination testing, which may be an indicator of oxidation in aging fuel.	Revise C13.8 to include a reference or standard for performing fungus and bacteria cultures. Include a recommendation to perform visual inspection for evidence of fungus and bacteria during maintenance evolutions. Guidance should also be provided for actions if fungus and/or bacteria are detected in the fuel oil. Include a recommendation for periodic particulate contamination testing.

4	C13.11 Page 8	This draft revision of RG 1.137 endorses use of ASTM D975-11 "Standard Specification for Diesel Fuel Oils." ASTM D975-11 considers blends containing up to 5% biodiesel not to be a biodiesel grade fuel. There is the potential that fuel purchased to this standard may not be free of biodiesel products. This imposes the need for independent supplier verification of biodiesel content. Biodiesel fuels have the potential to adversely affect the performance of diesel engines.	Include a provision in RG 1.137, C13.11 that allows use of an alternative fuel standard (such as Jet A specification fuel which conforms to ASTM Standard D1655) that addresses the concerns regarding biodiesel content and complies with existing licensee requirements for EDG operation and long-term fuel storage.