



Dresden Nuclear Power Station
6500 North Dresden Road
Morris, IL 60450

June 8, 2022

SVPLTR: #22-0016

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Dresden Nuclear Power Station, Unit 2 and Unit 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Subject: Deviation from BWR Vessel and Internals Project (BWRVIP) Guideline –
Inspection of Unit 2 and Unit 3 Shroud Vertical Welds

Reference: 1) BWRVIP-94, Revision 4: BWR Vessel and Internals Projects – Program
Implementation Guide, EPRI, Palo Alto, CA: 30020119689.

2) BWRVIP-76, Revision 1-A: BWR Vessel and Internals Project, BWR Core
Shroud Inspection and Flaw Evaluation Guidelines. EPRI, Palo Alto, CA: 2015.
3002005566.

Constellation Energy Generation (CEG), LLC is a member of the BWR Vessel and Internals Project (BWRVIP) and has committed to implementing BWRVIP products and to providing timely notification to the NRC staff if an applicable aspect of a BWRVIP product will not be implemented.

BWR Vessel and Internals Project document BWRVIP-76, Revision 1-A (Reference 2) specifies that core shroud vertical welds in repaired shrouds have a baseline inspection of 100% of the accessible length of each vertical weld over two successive refueling outages with at least 50% of the accessible portions inspected at the first outage. Re-inspection is based on the condition of the weld and the observed cracking, with a max interval of 10 years for UT or two-sided EVT-1 or 6 years for one-sided EVT-1. Furthermore, BWRVIP-76 Revision 1-A (Reference 2) specifies that inspection of the short, vertical welds below H7 is required in repaired shrouds unless the repair designer has indicated that these welds are not required for proper functioning of the repair.

Contrary to the above requirements, some of the Unit 2 and Unit 3 vertical weld required inspections have been attempted as specified in BWRVIP-76 Revision 1-A (Reference 2), but the exams yielded no credited coverage. Therefore, this constitutes a deviation from “needed” BWRVIP guidelines and a Deviation Disposition is required.

Specifically, the U2 V29-V32 and U3 V29-V32 and V20 welds cannot be examined via either EVT-1 or UT without disassembly of reactor internals from either the Inner Diameter (ID) or Outer Diameter (OD) of the Core Shroud. Although no coverage has been recorded on any of the V29 – V32 welds or the Unit 3 V20 weld in recent outages, Dresden has utilized the zoon feature to collect data even though no credit can be taken for coverage.

Based on the design and construction of the core support and shroud repair hardware, the risk of cracking in the Unit 2 and 3 V29 through V32 welds as well as the Unit 3 V20 weld is likely low and the consequences of cracking in these welds is relatively low. Therefore, the lack of inspection coverage for these four welds is assessed as acceptable, until such time as the welds can be made accessible for the needed examinations.

A Deviation Disposition was prepared in accordance with BWRVIP-94NP, Revision 4 (Reference 1). The Deviation Disposition contains an evaluation documenting the acceptability of not performing the "needed" Shroud Vertical weld inspections.

This letter is being transmitted for your information in accordance with BWRVIP-94NP Revision 4 (Reference 1). This letter is to notify the NRC of the deviation from "needed" BWRVIP guidance. No actions or approvals on the part of the NRC are required as a result of his letter.

There are no regulatory commitments contained in this letter. Should you have any questions, please contact Joshua Sarrafian 779-231-5299.

Respectfully,



Patrick J. Boyle
Site Vice President
Dresden Nuclear Power Station

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Dresden Nuclear Power Station
NRC Plant Project Manager Dresden Nuclear Power Station
NRC BWRVIP Project Manager
Illinois Emergency Management Agency – Division of Nuclear Safety