



Peach Bottom Atomic Power Station
Work Hour Rule (WHR)
Exemption Request

April 11, 2023 - Pre-Submittal Meeting

Constellation - Expected Meeting Participants

- Dave Gullott – Director, Licensing
- Ryan Stiltner – Director, Site Operations
- Kevin Lueshen – Sr. Manager, Licensing
- Brandon DeWalt – Site Operations, Shift Supervisor
- Wade Scott – Manager, Site Reg Assurance
- Tim Grimme – Sr. Regulatory Engineer, Site Reg Assurance
- Frank Mascitelli – Sr. Licensing Engineer, Licensing
- Ashley Rickey – Sr. Licensing Engineer, Licensing

10CFR26.205(d) Exemption

- Requesting a One-Time Exemption from the work hour controls specified in 10 CFR 26.205(d)(1)-(d)(7).
- Supports fall 2023 Refuel Outage (P3R24) scheduled for mid-October. Exemption period bounded by start and end of the outage or first 30 days of the outage, whichever is shorter.
- Part of a pilot program to further evaluate the feasibility of improving outage safety by reducing key team turnover frequency.
- Exemption applies to Unit 3 only. Personnel operating Unit 2 will maintain normal Work Hour Rule (WHR) compliance.
- Exemption applicable only to Operations and Fire Brigade work groups during the Refuel Outage. Note Fire Brigade covers both Units.
- Use same Alternative WHRs proposed under COVID-19 Emergency Work Hour Exemptions.
- This is not a COVID-19 Exemption Request - Requesting relief through normal exemption process.
- Scope limited to approximately 70 operations personnel.

10CFR26.205(d) Exemption (continued)

- Proposed WHR Alternative Controls:
 - Not more than 16 work-hours in any 24-hour period and not more than 86 work-hours in any 7-day period, excluding unit turnover;
 - A minimum 10-hour break is provided between successive work periods;
 - 12-hour shifts are limited to not more than 14 consecutive days; and
 - A minimum of 6-days off (MDOs) are provided in any 30-day period.
- The calculation of work hours and days off includes all work hours and days off during the applicable calculation periods, including those work hours and days off preceding initiation of the exemption period; and
- Requirements are established for behavioral observation and self-declaration during the period of the exemption.

Peach Bottom Alternative WHR History

- Peach Bottom has experience with using Alternative WHRs:
 - Covid 19 WHR Exemption granted 9/10/20 (ML20247J620),
 - Covid 19 WHR Exemption granted 10/13/21 (ML21265A438).
- No WHR violations during 2020 and 2021.
- No Self Declarations of Fatigue made in 2020 or 2021.
- Two fatigue assessments found an individual was fatigued from 1/1/20 to 4/3/23.
- No individuals assessed as fatigued during outage periods.

Peach Bottom Alternative WHR History (continued)

- Operations did not have any additional Operation Consequential Events during the two previous outages that employed Alternative Work Hour Rules.
- Operations was able to adjust individuals' days off to the day(s) that reduced the overall risk to the plant. The days off could be moved to match the work without a need to having too many individuals off on any given day.
- Requirements of 10 CFR 26.33, "Behavioral observation"; 10 CFR 26.209, "Self declarations"; and 26.211, "Fatigue assessments," remained in effect during the period of the exemption.

Reason/Drivers for Exemption Request

- The safe execution of a Refuel Outage is directly tied to the quality of the preparation the dedicated operation sub-teams conduct prior to the start of the outage.
- Two licensed operators are assigned to each of these sub-teams.
- Senior licensed individuals are maintained in reserve to fill in on the required MDOs, but despite the increased experience of these individual they cannot be as prepared as the two assigned individuals because they have limited time to understand the details.
- The WHR proposal improves safety due to proficiency continuity.

Reason/Drivers for Exemption Request (continued)

- During a Refuel Outage, Operations activities are critical during the initial shutdown when systems are tagged out of service. Operations is also critical during system restoration and start-up at the end of the outage. During a 12-15 day refueling outage these two spikes in the level of activities are blurred. There is not enough time between them to efficiently ensure everyone get their 3 days off in a 15-day fixed period. Under the standard Operation Outage WHRs our most prepared individuals are forced to take a day off when they are most needed.
- Under the proposed Exemption Request the station would be able to adjust everyone's days off to the day(s) that reduces the overall risk to the plant. The days off could be moved to match the work without need to having too many individuals off on any given day.

Peach Bottom Alternative WHR History (continued)

Outage	Outage Duration	Pandemic WHRs? (Y/N)
P2R24 (2022)	13 days, 17 hours, 50 minutes	N
P3R23 (2021)	12 days, 14 hours, 14 minutes	Y
P2R23 (2020)	10 days, 2 hours, 37 minutes**	Y
P3R22 (2019)	15 days, 21 hours, 8 minutes	N
P2R22 (2018)	15 days, 5 hours, 29 minutes	N

- Outages at Peach Bottom are consistently conducted in 10-15 days. This provides no windows where required days off can be accommodated under normal outage WHR without affecting preparation, proficiency, teamwork, and safe execution of the Operations sub-teams.
- **P2R23 shows the projected outage completion had a leak on the N16A nozzle not been identified during the RPV pressure test. Such discovery is not Operations intensive during the outage extension period. Since the benefits of Operations sub-team proficiency are diminished during the outage extension period, accommodation of required days off becomes possible without impacting nuclear safety.

Exemption Justification

- 10 CFR 26.9, “Specific Exemptions,” states that, upon application of any interested person or on its own initiative, the Commission may grant such exemptions from the requirements of the regulations in this part as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.
- Authorized by Law:
 - The NRC has authority under the Atomic Energy Act of 1954, as amended, to grant exemptions from its regulations if doing so would not violate the requirements of law. 10 CFR 26.9 allows the NRC to grant exemptions from the requirements of 10 CFR Part 26 with provision of proper justification. Approval of the proposed Exemption from 10 CFR 26.205(d)(1)-(d)(7) would not result in a violation of the Atomic Energy Act of 1954. Therefore, the requested Exemption is authorized by law.

Exemption Justification (continued)

- Will not endanger life or property or the common defense and security:
 - The Alternative WHRs established for Exemption Requests due to Emergency Public Health Declaration for COVID-19 have been determined by NRC to establish the minimum requirements necessary to maintain fatigue management within the original regulatory analysis and research supporting the 2008 10CFR26 Subpart I rulemaking changes.
 - The same regulatory basis regarding fatigue management also applies to non-COVID-19 conditions.
 - Existing programs implementing the requirements of 10 CFR 26.33, “Behavioral observation”; 10 CFR 26.209, “Self declarations”; and 26.211, “Fatigue assessments,” are robust and have been proven under previous COVID-19 WHR Exemptions.

Exemption Justification (continued)

- Otherwise in the public interest:
 - Using Alternative Work Hour Rules will reduce turnovers required by current outage MDO requirements within the focused and dedicated Operation's sub-teams.
 - Less turnovers of key team personnel during critical outage activities results in greater efficiency and improved safety due to keeping experienced personnel dedicated within sub-teams and reducing potential communication errors (proficiency continuity). Improved safety during Refuel Outage execution is in the public interest.
 - The reduction in operator outage travelers from other plants keeps other operating plants with significantly more work schedule margins, improving safety at other plants, which is in the public interest.

Justification (continued)

- Outage duration is reduced due to greater schedule efficiencies (approximately 1 day), resulting in the unit returning to grid sooner, providing more carbon free electric generation, which is environmentally in the public interest.

Final Discussions - Implementation

- Plan to submit Exemption Request by end of April 2023.
- To support outage planning activities, Peach Bottom will be requesting approval by September 1, 2023, to implement the Alternative WHRs at the start of the P3R24 refuel outage (mid-October).
- All existing transition rules (e.g., outage to on-line, uncovered to covered work status) will be maintained.

NRC Feedback

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Final Questions

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