



June 21, 2006  
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U.S. Nuclear Regulatory Commission  
Director, Office of Nuclear Material  
Safety and Safeguards  
Attn: Document Control Desk  
Washington, DC 20555

Gentlemen:

**Subject: Operational Status of the Modular Extraction/Recovery Facility (MERF) at the AREVA NP Richland, Washington Site; License No. SNM-1227, Docket No. 70-1257**

The purpose of this correspondence is to provide the NRC with information as to the current operational status of AREVA NP's Modular Extraction/Recovery Facility (MERF), particularly as it relates to the NRC's decommissioning timeliness regulations in 10 CFR 70.38. The status of MERF in this regard has been part of a broader discussion of Richland site-related decommissioning issues with NRC staff within NMSS/FCSS and NMSS/DWMEP.

MERF is a modular facility approved for operation via Amendment 10 to AREVA NP's license in March 1998 (TAC No. L30896). MERF was procured and brought on-line to assist in AREVA NP's then ongoing campaign to reduce the site's overall inventory of stored containerized solid wastes. More specifically MERF was focused on containerized solid wastes that contained relatively higher amounts of recoverable uranium for recycle into the site's fuel manufacturing operations and in particular such wastes that also designated as chemically dangerous wastes under the State of Washington's Dangerous Waste Regulations. Equipment within MERF includes equipment in which containerized wastes can be dumped and sorted, equipment for the dismantlement of HEPA filters, equipment for the shredding of certain waste types, and finally, equipment in which the appropriately sorted and pre-conditioned wastes can be chemically washed in a dilute nitric acid solution to extract the uranium, thereby creating a uranyl nitrate solution suitable for utilization in AREVA's fuel manufacturing processes.

MERF completed its processing of the pertinent portion of the site's legacy containerized waste inventory in May 2004. Over that initial campaign it processed approximately 55,516 ft<sup>3</sup> of solid low-level radioactive waste and recovered approximately 3,000 kilograms of low-enriched uranium for recycle into AREVA's fuel fabrication processes. Concurrent with and since the initial MERF campaign, AREVA has aggressively pursued and implemented waste minimization and in-plant recycling activities to eliminate and/or significantly diminish the waste streams that contributed to the significant past accumulation of solid wastes requiring processing in MERF. Based on the success of these efforts, MERF was placed into a secured standby status in mid-2005.

## **AREVA NP INC.**

**An AREVA and Siemens company**

The current secured standby status of MERF does not constitute a decision to permanently cease operations in that facility. Instead it constitutes a business and scheduling decision with no reflection on the ongoing mission or usability of the facility and its processes. Certain waste streams (high uranium HEPA filters) continue to be generated on-site, albeit at a reduced rate, that have no current processing/disposal pathway apart from MERF. MERF is currently under consideration as a primary or alternative processing pathway to recover uranium from incinerator ash, generated from AREVA's Solid Waste Uranium Recovery (SWUR) incinerator. And lastly, due to the effectiveness and flexibility of its processes, MERF constitutes a valuable resource for the management of potential future wastes, either from on-site or off-site sources.

In summary, MERF remains a viable and valuable waste processing/recycling asset with currently identified and potential additional waste feeds. The current standby status is a business/ scheduling decision brought on by the completion of the legacy waste processing campaign and the successful minimization of traditional MERF feed streams. AREVA does not believe this interim action falls within the intended scope of the NRC's decommissioning timeliness rules and therefore believes that the notification/extension request requirements therein do not apply to MERF at this time. However, in the event that the NRC does not concur with AREVA's position and in recognition of the notification/extension request deadlines imposed by the timeliness rules, we have included, as an attachment, supplementary information as would be needed to support a request for the delay/postponement of decommissioning under 10 CFR 70.38(f). The information provided is in accordance with NRC guidance in NUREG 1757, Volume 3, Section 2.6.4. If it is determined by the NRC that the timeliness rules do apply to the current status of the MERF facility, please accept this as the necessary notification and request for a postponement in accordance with 10 CFR 70.38(f).

We appreciate the NRC's consideration of this issue as well as the clarifications provided via our earlier discussions. If you have questions, please contact me at (509) 375-8409.

Very truly yours,



R. E. Link, Manager  
Environmental, Health, Safety & Licensing

/mah

cc: U.S. Nuclear Regulatory Commission  
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## Attachment

### Supplementary Information to Support a Postponement in the Initiation of Decommissioning for AREVA NP's Modular Extraction/Recovery Facility (MERF) in Accordance with 10 CFR 70.38(f) and NUREG 1757, Volume 3, Section 2.6.4

1. Principal activities, in this case radioactive solid waste processing, were last conducted in MERF in May 2004.
2. Notification to the NRC that no principal activities have occurred in MERF for a period of 24 months would be required by July 2006, per the requirements of 10 CFR 70.38(d). Per 10 CFR 70.38(f), a request to delay or postpone initiation of the decommissioning process would therefore be due to the NRC no later than June 2006.
3. AREVA NP plans to initiate decommissioning of MERF at the time of final Richland site decommissioning.
4. AREVA NP anticipates that ultimate decommissioning of the Richland site will require a decommissioning plan.
5. AREVA NP has no plans for current decommissioning of the MERF because the facility remains a viable and valuable waste processing/recycling facility with both current and potential future feed streams. The present safe standby condition is a business/scheduling issue, not a decision to permanently cease use of this facility. Interim decommissioning of the facility would expend resources and contribute to worker exposures, both of which would have been unnecessary when the facility is restored to service. As discussed in No. 9 below, no adverse impact to worker health and safety, public safety, or the environment is associated with the current standby status of MERF. In fact, premature decommissioning of the MERF could increase the utilization of waste disposition options that favor direct disposal of radionuclides (uranium) at the expense of recovery/re-use.
6. By virtue of its original design and the precautions taken in placing it in standby, there is no reason to anticipate that MERF will experience significant deterioration during the standby period that will make startup difficult or future decommissioning more complex. MERF is a painted steel structure relatively resistant to environmental attack/deterioration. Interior equipment was selected for its compatibility with the chemical and physical hazards of the waste treatment processes.

The interim shutdown process included a number of provisions to minimize deterioration. The external nitric acid tank, leased from the chemical supplier, was removed and all interior tanks and chemical lines were drained and flushed. The facility water lines, as well as the boiler in the adjacent supply tent, have been winterized. All stored process chemicals and trade name products have been removed from the facility. The fire alarm system for the facility is being maintained operable and fire extinguishers are checked in conjunction with the site-wide extinguisher maintenance program. The facility is posted out-of-service and maintained in a locked status to preclude unnecessary/unauthorized access. MERF itself is located in the core of the site's fenced secured area.

7. The MERF is included as a Production Support (Ancillary) facility in AREVA's NRC-approved Decommissioning Funding Plan (E06-04-007, Version 2.0; December 2005). The DFP conservatively assumes that decommissioning of MERF will involve removal/disposal of contaminated equipment plus decontamination of the facility and supporting structures. Escalation of decommissioning costs for MERF over time will track with general escalation in labor and waste disposal rates. AREVA compensates for this escalation via updates to its DFP and associated cost estimate in compliance with 10 CFR 70.25(e). No other extraordinary factors are foreseen that will increase MERF decommissioning costs over the period prior to ultimate decommissioning.
8. AREVA NP provides financial assurance for decommissioning via a parent company guarantee in accordance with 10 CFR 70.25(f)(2). Annual recertification of the guarantee (passage of the underlying financial test) is conducted in accordance with 10 CFR 30, Appendix A. The last such update of the parent company guarantee was submitted in April 2006.
9. All residual waste inventory, process chemicals, laboratory chemicals, extraneous combustible materials, and trade-name products (process and cleaning) have been removed from MERF. As previously noted, process tanks and lines have been drained and flushed. These actions have removed the possibility for work area or environmental releases of the waste materials processed through MERF or of the chemicals used to support those work processing activities.

As part of the process of placing MERF in a secured standby status, the facility was subjected to a general cleanup of accessible interior surfaces. This cleanup achieved surface contamination levels well below site action levels requiring cleanup of surfaces in contamination controlled areas. Based on the most recent removable contamination survey conducted in the facility (June 16, 2006), the highest measured levels of removable alpha and beta/gamma contamination were 240 and 400 dpm/100 cm<sup>2</sup>, respectively. MERF will continue to receive contamination and direct radiation surveys in accordance with AREVA's currently approved radiation protection procedures.