



April 25, 2005
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U.S. Nuclear Regulatory Commission
Director, Office of Nuclear Material
Safety and Safeguards
Attn: Document Control Desk
Washington, D.C. 20555

Gentlemen:

Subject: Application for Increased U-235 Possession Limit for the Framatome ANP, Inc. (FANP) Richland Fuel Fabrication Facility; License No. SNM-1227; Docket No. 70-1257

- Ref.: 1. Letter, D.W. Parker to USNRC, "Licensing Actions Requested to Support the Blended Low Enriched Uranium (BLEU) Project at Framatome ANP's (FANP's) Richland, Washington Facility (License No. SNM-1227, Docket No. 70-1257)," dated August 27, 2003.
- Ref.: 2. Letter, J. Lubinski to D.W. Parker, "Review of Licensing Actions Needed to Support Blended Low-Enriched Uranium Project at Framatome ANP, Inc. - Richland (TAC No. L31777)," dated October 23, 2003.

As the NRC is aware, Framatome ANP, Inc. (FANP) has entered into a contract with the Tennessee Valley Authority (TVA) for the production of commercial reactor fuel from excess government high enriched uranium acquired by TVA per a contract with the U.S. Department of Energy. Blended down (< 5% U-235) uranyl nitrate solution, received at FANP's Oxide Conversion Facility in Erwin, Tennessee, is converted to blended low-enriched uranium (BLEU) powder at that facility. The resultant BLEU powder is shipped to Richland for the remaining fuel manufacturing processes.

Via the Reference 1 correspondence, FANP outlined its assessment of required licensing actions to support the BLEU project activities at its Richland, Washington facility. In Reference 2 the NRC concurred with FANP's assessment but recommended that the two required licensing actions - modified powder storage configuration/controls and increased site U-235 possession limit, be submitted as separate amendments. Licensed authority for the modified powder storage approach was subsequently received as Amendment No. 42 to License No. SNM-1227 (May 27, 2004). The amendment application being submitted at this time (attached) addresses the second required licensing action, i.e., increasing the site possession limit for U-235. The application defines and provides the basis for the requested increase. In addition it addresses the related potential safety program impacts noted by the NRC in Reference 2 as requiring consideration.

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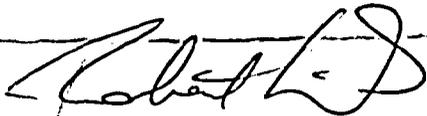
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Based on current BLEU powder receipt and product shipment schedules, FANP predicts that it may require a U-235 possession limit in excess of its currently authorized 25,000 kg limit as early as February 1, 2006. NRC's review and approval of this amendment application is requested to support this schedule.

FANP appreciates the NRC's past actions to support the BLEU project schedule. If you have questions relative to the current request, please feel free to contact me at 509-375-8409.

Very truly yours,



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

/mah

cc: Mr. M.N. Baker, USNRC
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Enclosures

Amendment Application for Increased U-235 Possession Limit;
Framatome ANP, Inc. (FANP) Richland Facility; License No. SNM-1227

Amendment Request

FANP requests that the U-235 possession limit in License No. SNM-1227 be increased from 25,000 kg U-235 to 75,000 kg U-235.

Justification

The increased U-235 possession limit will be needed to accommodate continued receipt of Blended Low Enriched Uranium (BLEU) powder from FANP's BLEU powder production facility in Erwin, Tennessee. The difference in the required powder production/shipping schedule at the Erwin facility and the BLEU fuel production schedule at the Richland facility will necessitate progressively increased storage of BLEU powder in Richland, with the result that onsite inventories of U-235 may exceed 25,000 kg as early as February 1, 2006. The 55-gallon drummed storage of BLEU powder in the BLEU powder storage warehouse was previously authorized by the NRC via License Amendment No. 42 to License SNM-1227 (May 27, 2004). It should be noted that while full utilization of the BLEU powder storage warehouse constitutes the currently identified need for the possession limit increase, the possession limit increase request is not specific to that location/operation and, if granted, will apply sitewide. However, this application requests no change to currently authorized activities other than the possession increase itself.

Environmental Impact

The requested U-235 possession limit increase is not anticipated in itself to increase the environmental impact of the Richland operations. This application requests no change to currently authorized activities and as such authorizes no new environmental effluents that would create additional impacts or require changes to FANP's current environmental programs. The immediate need underlying the amendment request - increased drummed uranium powder storage in the BLEU warehouse - is not associated with any increase in throughput within the BLEU fuel production processes (powder preparation, pellet pressing, sintering, grinding, etc). No increase in environmental impacts from the BLEU facilities as currently licensed is anticipated. Based on the above discussion, FANP is not submitting an updated environmental report in conjunction with this amendment request. It is anticipated that a fully updated environmental report will be submitted in 2006 in conjunction with the scheduled renewal of SNM-1227.

Radiological/Fire Protection Impact

No changes to the site radiation protection program are necessitated by the U-235 possession limit increase and no other changes to site activities or facilities are being requested that would impact the program. The immediate reason for the requested increase - added storage quantities in the BLEU powder storage warehouse - involves powder storage in closed containers with some potential for low levels of external contamination, posing insignificant incremental airborne exposure risk. The design of the BLEU powder storage warehouse (shelf construction, wall construction, etc.) considered the higher (with respect to non-BLEU powder)

external dose associated with BLEU-derived powder. External doses will continue to be monitored per the existing radiation protection program as stored quantities increase. Additional protective measures, for example additional shielding, will be implemented if needed under that program.

The increased U-235 possession limit is not expected to adversely impact the site's fire protection status. The current fire protection program, including internal prevention, detection, and response measures supplemented by offsite response support, is adequate for currently authorized activities, irrespective of stored inventory or throughput; the amendment requests no change in these activities. Full utilization of the BLEU powder storage warehouse offers no additional fire risk in that the activity entails powder storage in steel drums on concrete shelves within a concrete structure.

Material Control and Accounting (MC&A) Impact

The Richland plant's MC&A program will not require modification relative to the requested possession limit increase. The basic program elements (receipt, processing, storage, shipping, measurement, verification, and current knowledge) are not inventory or throughput-dependent and therefore will not require modification to accommodate U-235 possession quantities exceeding 25,000 kg. It should be noted that FANP's Fundamental Nuclear Material Control (FNMC) Plan has been revised to specifically address the BLEU project. That FNMC Plan revision (Rev. 35) was approved by the NRC on May 25, 2004 as License Amendment 41 to SNM-1227.

Emergency Preparedness Impact

The requested increase in the U-235 possession limit will not increase the potential emergency-related impacts of the plant or require enhancements to the site's emergency preparedness program; the application requests no new authorized facilities or activities beyond the possession limit increase. The immediate need for the request - increased BLEU powder storage - is a low risk activity, i.e., drummed storage in a non-combustible structure dedicated solely to storage activities. It poses no new emergency sequences or scenarios nor would it increase the footprint of the impacted area beyond that postulated for current emergency-related powder release scenarios. Addition of the BLEU facilities has necessitated an administrative update to the site's emergency plan and procedures; this revision is currently under preparation.

Decommissioning Impact

While the possession limit increase will not in itself impact site decommissioning, the immediate need for the increase, i.e., the BLEU project, has increased the site's decommissioning liability. This is due to the incremental decommissioning costs that will be associated with the newly constructed facilities and installed equipment dedicated to BLEU. These costs will occur at the time of facility closure and require coverage under FANP's Decommissioning Funding Plan (DFP).

FANP's most recent DFP update (January 24, 2003) was approved by the NRC via approval letter of November 26, 2003 (TAC No. L31770). In compliance with the three year update criterion in 10 CFR 70.25 (and as noted in the approval letter), FANP is required to submit an updated DFP to the NRC on or before January 24, 2006. FANP intends to address the incremental decommissioning costs associated with BLEU as a part of that update.

It should be noted that recent completion of the surface impoundment inventory removal/ processing, currently financially assured for in excess of \$7M based on the current DFP, has built in a significant conservatism into FANP's current financial assurance package on file with the NRC. This conservatism has been maintained in FANP's most recent financial assurance recertification filed with the NRC on April 1, 2005. Therefore no shortfall in financial assurance coverage should result from waiting until the forthcoming DFP update to address the incremental BLEU-related costs. Accordingly, an updated DFP is not being submitted at this time.

Physical Security Impact

The Richland plant's physical security program will not require modification to accommodate the higher U-235 possession limit. No changes to security-related facilities, equipment or practices are anticipated. FANP's current physical protection program is documented in its Physical Protection Plan for Special Nuclear Material of Low Strategic Significance, on file with the NRC. Although not required in general for this application, or specifically related to BLEU, the security plan is slated for revision once post - 9/11 required security upgrades have been communicated by the NRC.

Summary

A site possession limit exceeding the current limit in SNM-1227 of 25,000 Kg U-235 will be needed as early as February 1, 2006. The immediate need for this license amendment is the planned accumulation of blended low-enriched uranium (BLEU) powder in support of FANP's contract with TVA. The BLEU activities and facilities at Richland are already licensed and full utilization of the BLEU powder storage warehouse, as discussed above, requires no further revisions to the site's safety programs. FANP recognizes that any future proposed new activities or facilities that may benefit from this currently requested possession limit increase will need to be evaluated for licensing actions on their own merits, including any needs for modified or enhanced safety programs.