

February 13, 2012

Mr. Josh Leftwich
Director of Radiation Safety and Licensing
Cameco Resources
2020 Carey Ave., Suite 600
Cheyenne, WY 82001

SUBJECT: PHASES I AND II OF HIGHLAND PROCESSING PLANT RENOVATION AT
SMITH RANCH HIGHLAND URANIUM *IN SITU* RECOVERY FACILITY,
POWER RESOURCES INC., DOUGLAS, WYOMING, LICENSE SUA-1548

Dear Mr. Leftwich:

By letters dated September 15, 2011 and January 11, 2012, Power Resources, Inc., (PRI), doing business as Cameco Resources (Cameco), submitted to the U.S. Nuclear Regulatory Commission (NRC) staff, a letter containing Cameco's plan for the first and second phases of renovating the Highland Processing Facility (HPF). The HPF is part of the Smith Ranch Highland Uranium Project and operates under license SUA-1548. Both letters were submitted for informational purposes and did not request a formal review or approval by the NRC staff. Therefore, this letter provides NRC staff comments on Cameco's proposed activities.

The NRC staff understands that Cameco's renovation plans will ultimately result in resuming yellowcake drying activities at the HPF. Cameco has structured its renovation plans in three phases: Phase I work consists of basic infrastructure improvement to the HPF; Phase II work involves removal and replacement of the existing processing features within the HPF; and Phase III (also referred to as Phase 4A) consists of removal of the existing calciner dryer and replacement with a vacuum dryer system. The NRC staff is particularly interested in Phase III (4A) as work associated yellowcake dryers has a direct nexus to radiological health and safety. The NRC staff understands that Cameco plans to process uranium laden resin from both its remote satellite facilities (Gas Hills, North Butte, and Ruth) and other NRC licensed facilities.

The NRC staff recommends that Cameco's HPF renovation activities be reviewed using the Safety and Environmental Review Panel (SERP) process. The purpose of the SERP process is to determine that changes, tests, or experiments proposed by a licensee activities remain within the safety and environmental envelope considered by the NRC staff during the licensing process. If the SERP process cannot make that conclusion, a license amendment is required. Condition 9.4 in license SUA-1548 identifies the criteria a licensee should consider when performing the SERP process. The NRC staff reviews changes made during the SERP process as part of its inspection program.

The NRC staff observes that conditions 9.1 and 10.1.2c of license SUA-1548 are relevant to Cameco's plans to resume production at the HPF. Condition 9.1 identifies the authorized places of use and Condition 10.1.2c contains a requirement for NRC notification prior to restart of the Highland dryer. Cameco should be aware that because activities associated with yellowcake dryers have a direct nexus to radiological health and safety that the NRC staff will conduct a pre-operational inspection prior to operation of the yellowcake dryer at the HPF. This is consistent with the approach in Inspection Manual Chapter 2641.

The NRC staff appreciates Cameco's efforts to share its plans for renovating the HPF. The NRC staff requests that Cameco provide a similar plan for Phase III/4A at an appropriate time.

If you have any questions, I can be reached at 301-415-0724, or by email at Douglas.Mandeville@nrc.gov.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

Sincerely,

/RA/

Douglas T. Mandeville, Project Manager
Uranium Recovery Licensing Branch
Decommissioning and Uranium Recovery
Licensing Directorate
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

Docket No.: 40-8964
License No.: SUA-1548

cc: Brent Berg

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Sincerely,

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Douglas T. Mandeville, Project Manager
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Docket No.: 40-8964
License No.: SUA-1548

cc: Brent Berg

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