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## **Attachment 3**

### **UNC (2011)**

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Response to August 6, 2019 Environmental Request for Additional Information (RAI),  
United Nuclear Corporation (UNC) License Amendment Request to Move Mine Waste from the Northeast Church  
Rock Mine to the Church Rock Mill Site, McKinley County, NM (Docket No. 040-8907)



General Electric Company  
Corporate Environmental Programs

Randall McAlister  
Senior Program Manager

3135 Easton Turnpike  
Fairfield, CT 06828  
USA

T 203 373 3855  
F 203 373 2687  
Randall.mcalister@ge.com

Mr. Clancy Tenley  
Assistant Director, Superfund Division  
Partnerships, Land Revitalization & Cleanup Branch  
EPA Region 9  
75 Hawthorne Street  
San Francisco, CA 94105

August 29, 2011

Re: NECR Mine  
Clarification of GE/UNC Commitments  
Associated with EECA Alternative 5A

Dear Clancy,

Based on recent conversations with you and others at EPA Region 9, it is our understanding that EPA is in the final stages of drafting the Action Memorandum and associated documents for the NECR Mine site. In anticipation of a public release of these documents as early as September of this year, and in consideration of the numerous elements of this remedy (and associated factors) we have discussed with EPA, Navajo leadership, the local Navajo community and the other stakeholders in recent months, we believe that it is appropriate to clarify certain commitments GE/UNC is willing to make with respect to EPA selection of EE/CA Alternative 5A, "Above Ground Repository on the UNC Mill Facility, with Principal Threat Wastes Reprocessed Offsite" (the "Mill Site Remedy"). Our clarifications are provided below.

Mine Waste Removal

UNC/GE is committed to removing mine waste material from the NECR Mine site for transportation and consolidation at the existing tailings impoundment at the nearby Church Rock Mill site. UNC/GE will remove mine waste material from the NECR Mine site to reduce the 95 percent upper confidence limit (UCL) of the mean radium-226 concentration at the Mine site to the EPA action level of 2.24 pCi/g, consistent with the Multiagency Radiation Survey and Site Investigation Manual (MARSSM) method.

Repository Construction

UNC/GE is committed to construct a repository over an existing tailings impoundment at the UNC Church Rock Mill site to contain the NECR Mine site waste material. The base of the repository shall incorporate the existing, fine-grained cover material on the tailings cell which, if necessary, shall be re-compacted to achieve a permeability performance standard, to prevent migration of mine wastes out of the repository. The permeability performance standard will be established as part of the design process. Following placement of mine waste materials, UNC/GE will construct a soil cover over the mine waste materials. UNC/GE will incorporate a mix of native plant species into the cover, along with appropriate soil textures and thicknesses and rip rap to limit erosion, limit water flux to

the underlying material and limit radon-222 flux to the atmosphere. The cover will be designed and constructed so as not exceed an average release rate of 20 picocuries per square meter per second (or to limit erosion, water and radon-222 flux consistent with the requirements of 10CFR Part 40 appendix). Details of the cover system will be established during the design process.

Following construction of the repository and closure of the UNC Church Rock Mill site, title to the mine waste material and byproduct material and land which is used for disposal of mine waste material and byproduct material at the UNC Mill Site shall be transferred to the United States for long-term surveillance.

#### Principal Threat Waste

In the EE/CA, EPA defines Principal Threat Waste (PTW) as waste containing either 200pCi/g or more of Ra-226 or 500 mg/kg or more of total uranium, and calls for this "PTW" to be disposed or reprocessed at an offsite location. However, subsequent to release of the EECA, new facts and circumstances have arisen which beg reconsideration of the PTW concept.

First, as reported to EPA in a meeting on March 9, 2011, calculations show the average activity level in the existing tailings at the Mill Site is approximately 332 pCi/g, well above the PTW threshold level. In fact, adding the PTW to the tailings is, conservatively, estimated to increase the average activity level in the final repository only from 332 pCi/g to 326 pCi/g, a change of approximately one percent. Second, UNC/GE is aware of agency, community and other stakeholder interest in potential disposal of mine wastes from other closed mines at the Church Rock Mill site repository, including waste volumes and activity levels which would dwarf any potential risk associated with the relatively small volume of PTW present at the NECR Mine site. Third, EPA has informed UNC/GE of its interest in permanent relocation of residents away from the immediate vicinity of the NECR site. Hence, given (1) that adding the "PTW" material to the Mill site repository will not significantly alter the nature/ risk of the material to be disposed there; and, (2) that the distance from the repository to any residences will be much greater than was foreseen at the time the EECA was published; and, (3) in consideration of risks to the public and to the environment from long-distance hauling of PTW (potential traffic accidents, exposure, and greenhouse gas emissions), UNC/ GE strongly believe that disposal of PTW in the Mill Site repository is the safest, most protective, and most prudent approach.

However, should EPA decide off-site disposal/reprocessing of PTW is still needed, UNC/GE will remove PTW from the 11 locations in Ponds 1, 2, and 3, the sediment pad and the NECR-1 pad, where sample results collected as part of the Removal Site Evaluation identified waste materials with concentrations above the defined PTW criteria. Following removal, UNC/GE will perform a gamma survey to confirm that PTW has been removed from these locations. UNC/GE will transport PTW to a processing or offsite disposal facility.

#### Preference for Hiring

For remedy construction, UNC/GE is committed to seek every opportunity to employ and will give first preference to qualified local Navajo labor, to the extent consistent with law. Given that most hiring will involve licensed heavy equipment operators, including many with up-to-date HAZAWOPR training and certification, UNC/GE encourages EPA, sister agencies and community organizations to provide requisite training and certification opportunities to interested Navajo citizens.

#### Perpetual Scholarship

Following selection of the Mill Site Remedy, UNC/GE will provide a perpetual scholarship fund to the Navajo nation. This scholarship, either to the University of New Mexico or to Arizona State University, at the discretion of UNC/GE, will provide a four year scholarship to one qualified Navajo student,

each year, in perpetuity. Details of candidate selection for and administration of the scholarship will be determined in consultation with the Navajo.

#### Upgrade of Pipeline Canyon Road

UNC/GE, as part of the Mill Site Remedy, is committed to construction of improvements to Pipeline Canyon Road, in the area north of the tailings impoundments. UNC/GE will develop and evaluate options to ensure vehicular crossing of the unnamed arroyo is not impeded by seasonal storm water flows. This may involve raising road bed elevations, upgrade to the crossing itself, and/or realignment of the roadway.

#### Hogan Building Materials

UNC/GE is aware of Navajo interest in building additional hogans in the nearby community. Following selection of the Mill Site Remedy, UNC/GE will provide building materials to allow the community to construct up to four traditional hogans in the area.

#### Accommodation of Mine Wastes from Other nearby Closed Mines

UNC/GE understands EPA, Navajo and perhaps other stakeholder interest in consolidation of mine wastes from other nearby closed mine sites into the proposed Church Rock Mill repository. UNC/GE recognizes the potential benefits of this approach to the community and potentially to other stakeholders. To the extent practicable, UNC/GE is committed to develop a design for the proposed on-cell, Mill Site Remedy, that could accommodate certain other mine wastes in addition to the mine wastes from the NECR Mine.

UNC/GE also recognizes the potential administrative and legal challenges that may exist. UNC/GE recommends EPA consider Criterion 11.D of Appendix A of NRC Regulations at 10 CFR Part 40, which may provide an administrative pathway for disposal of other mine wastes at the site following license termination and transfer of long-term surveillance to the United States.

#### Renewable Energy Projects

UNC/GE recognizes the agencies, community and Navajo Nation interest in renewable energy opportunities. UNC/GE recognizes the benefits of renewable energy and shares an interest in these types of projects. UNC/GE, though GE's Energy business, has begun discussions with Navajo Nation leadership entirely focused on renewable energy, and hopes these discussions may lead to a partnership in development of renewable energy resources on the Navajo reservation.

If you have any questions regarding this letter, please contact me at your convenience. On behalf of the UNC/GE team, we look forward to working with you, and to continued progress with the NECR Mine project.

Sincerely,



Randall McAlister  
Senior Program Manager  
UNC/GE Remedial Team Lead