

TO: THE MEMBERS OF THE AUTHORITY

FROM: THE GENERAL COUNSEL

DATE: April 2, 2010

SUBJECT: ADOPTION OF PHASED DECISIONMAKING ALTERNATIVE WITH REGARD TO REMEDIATION OF THE WEST VALLEY SITE

Summary

The Members are requested to adopt a resolution approving the Phased Decisionmaking Alternative set forth in the Final Environmental Impact Statement (FEIS) that the Authority and the U.S. Department of Energy (DOE) jointly prepared and published on January 29, 2010 for the West Valley site. The FEIS identified Phased Decisionmaking as the preferred alternative for the West Valley cleanup. During Phase 1, which is expected to last up to ten years, DOE will remove significant sources of contamination from the site at a cost of over \$1 billion. Other key facilities, including the State-Licensed Disposal Area (SDA), a 15-acre former commercial low-level radioactive waste disposal facility, will continue under active management during Phase 1. NYSERDA and DOE will conduct additional scientific studies during Phase 1, with the goal of reducing the uncertainties associated with the Phase 2 decisions. These Phase 2 decisions would be made before the end of the ten year period. The rationale for the Phased Decisionmaking Alternative is set forth in full in the attached Findings Statement, which the Authority is required to prepare under the State Environmental Quality Review Act (SEQRA) and is summarized below.

Site Background

The Western New York Nuclear Service Center (Center, or Site), consisting of approximately 3,340 acres located near West Valley, Cattaraugus County, is owned by the Authority on behalf of the State of New York. The Center was established in the 1960s in response to a federal call to commercialize the reprocessing of spent nuclear fuel from power reactors. From 1966 to 1982, a private company, Nuclear Fuel Services (NFS), leased the Site from the Authority. NFS reprocessed spent nuclear fuel obtained from both federal and commercial nuclear facilities, and recovered uranium and plutonium for the federal government. NFS ceased operations in 1972, leaving behind two disposal areas and lagoons, contaminated buildings, 600,000 gallons of high level radioactive waste (HLRW) and other hazardous and radioactive waste generated by reprocessing activities. The federal government has incurred more than \$2 billion in costs to date, and New York has spent over \$270 million - the only state in the country to contribute to the cost of HLRW cleanup.

EIS Process

The publication of the Findings Statement marks the culmination of an effort that began in 1989 when the Authority and DOE agreed to prepare a joint EIS in order to fulfill their respective environmental evaluation responsibilities under SEQRA and the National Environmental Policy Act (NEPA). The two agencies decided to prepare a joint EIS in order to better integrate the environmental evaluation of the entire Site, and avoid unnecessary overlapping and duplication of efforts. The EIS identifies and assesses the potential environmental impacts of three different alternatives for cleaning up the Site, each of which is proposed to meet: (1) DOE's responsibilities under the federal West Valley Demonstration Project Act, enacted by Congress in 1980 to remediate the HLRW and other contamination, with regard to an approximately 167 acre portion of the Center (the Project Premises), and (2) the Authority's management responsibility for the remainder of the Center (the Retained Premises), which includes the SDA. Those alternatives include the Sitewide Removal Alternative, the Sitewide Close-in-Place Alternative, and the Phased Decisionmaking Alternative.

NYSERDA and DOE issued a draft EIS in December 2008 which identified the Phased Decisionmaking Alternative as the preferred alternative. The DEIS proposed that Phase 1 would last "up to 30 years," so that final cleanup decisions might not be made until three decades from now. During the nine-month public comment period, various elected officials (including members of New York's Congressional delegation and the State Legislature), the Citizen Task Force, environmental groups and members of the public: (1) called for an immediate decision to exhume and remove all facilities and contamination from the Site and transport the wastes to an appropriate disposal facility (notably, there is no federal facility for disposal of HLRW), and (2) strongly objected to the 30 year time period, questioning why such a lengthy period of time is necessary to reach final cleanup decisions for the Center.

Based on these objections, the Authority successfully pressed DOE and the other involved governmental agencies (the U.S. Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, the N.Y.S. Department of Environmental Conservation and the N.Y.S. Department of Health) to shorten the time period for Phase 1 to ten years. Authority staff contended that ten years is an adequate amount of time to complete the necessary studies and incorporate the findings and new scientific information from the studies into a Phase 2 decision. Moreover, since the cleanup actions that will be implemented during Phase 1 are expected to take 8-10 years to complete, Staff asserted that making a Phase 2 decision in ten years will best position the governments to keep the cleanup momentum moving and ensure that the existing trained workforce at the Site will not be lost between the two phases of work. The FEIS, issued on January 29, 2010, adopted the Phased Decisionmaking Alternative outlined in the DEIS, but specified that a Phase 2 decision would be made no later than ten years after issuance of the DOE Record of Decision (ROD) and the Authority Findings Statement.

Discussion

When a state agency decides to carry out or approve an action which has been subject to an EIS (in the instant case, implementation of Phased Decisionmaking), the agency is required to issue a SEQRA findings statement which discusses the application of the agency's

environmental review to the action. The statement must explain how SEQRA's requirements have been met, provide a rationale for the agency's decision, and demonstrate that any environmental effects revealed in the review process will be "minimized or avoided to the maximum extent practicable." NY Environmental Conservation Law, section 8-0109(8). The Authority's Findings Statement certifies that these requirements have been met, for the following reasons.

First, the FEIS analysis does not provide sufficient information to demonstrate that either the Close-in-Place or Exhumation Alternative avoids or minimizes adverse environmental impacts to the maximum extent practicable. The Authority is not in agreement with certain aspects of the approach used in the FEIS to analyze environmental and other impacts from either of these alternatives. The Authority's concerns, which are presented in the Foreward to the FEIS, relate to both the analysis of long-term impacts from in-place closure of facilities and contamination and the exhumation of facilities and contamination. Based on issues that the Authority raised pertaining to the accuracy and uncertainties of soil erosion prediction models, the long-term performance of engineered barriers, and flaws in the groundwater flow and transport models, Authority staff does not have confidence that the long-term impacts from the Close-In-Place Alternative have been accurately analyzed and discussed in the document. Staff believes that the Exhumation approaches in the FEIS could be successful, but as currently presented they appear to be overly conservative, and based on extreme conditions, rather than on conditions that are more likely to be encountered during exhumation.

Second, substantial cleanup work will be completed during Phase 1 without biasing future remediation decisions on remaining facilities in Phase 2. The Phase 1 actions will remove a significant amount of contamination at the Site. Moreover, completing cleanup work in phases is a logical approach. Phase 1 would allow up to ten years for collection and analysis of data and information on major facilities or areas (such as the HLRW tanks, NRC-licensed Disposal Area and SDA), with the goal of reducing uncertainties associated with the Phase 2 decisions.

Finally, a study prepared by the Authority's consultants stated that the public health risk associated with active management of the SDA and other areas of the Retained Premises during Phase 1 will be well below applicable regulatory standards. The SDA is operated under a Radioactive Materials License issued by DOH and a Radiation Control Permit issued by DEC. Authority staff maintains the SDA by performing routine inspections, quarterly facility inspections under the Resource Conservation and Recovery Act (RCRA), and scheduled field walkovers of the covered landfill area and the surrounding slopes. During development of the DEIS, the Authority commissioned a team of scientific experts to assess the impacts from the Phased Decisionmaking Alternative for the SDA. Led by Dr. B. John Garrick, who is the current Chairperson of the U.S. Nuclear Waste Technical Review Board and a former President of the Society of Risk Analysis, the team evaluated the risk to the public from continued operation of the SDA during Phase 1 with its current physical and administrative controls. The team prepared a quantitative risk assessment (QRA), which included detailed models for the mobilization, transport, distribution, dilution, and deposition of released radioactive materials throughout the environment surrounding the SDA, including the integrated watershed formed by Erdman Brook, Franks Creek and Buttermilk Creek. The QRA Team concluded that the public health risk from operating the SDA for the next 30 years is well below widely applied radiation dose limits

specified in regulations issued by DEC and the U.S. Nuclear Regulatory Commission. Of course, the risk associated with managing the Site for 30 years would likely be greater than the risk associated with managing the Site for 10 more years, as called for in the FEIS. The QRA Team did explicitly state that the low level of risk will be maintained only if the Authority continues to operate the SDA according to its current physical and administrative controls - which Staff fully intends to do.

Next Steps

The Authority and DOE will conduct additional scientific studies during Phase 1, designed to improve long-term technical analyses so both agencies can make better-informed decisions with respect to remaining facilities at the Center. The Authority and DOE will seek input from various stakeholders- including regulatory agencies, the Citizen Task Force, and environmental/citizen groups that closely monitor Site activities- when designing and implementing the studies. Phase 2 decisions, which will be made no longer than ten years after issuance of DOE's ROD and the Authority's Findings Statement, will be based on the results of the Phase 1 evaluations. The decision-making process employed by the Authority at that time will comply with SEQRA and will include opportunities for public participation.

Attachment