ENVIRONMENTAL IMPACT STATEMENT SCOPING PROCESS

SCOPING SUMMARY REPORT

Proposed AREVA Enrichment Services, LLC
Eagle Rock Enrichment Facility
Bonneville County, Idaho

1. INTRODUCTION

On December 30, 2008, AREVA Enrichment Services LLC (AES) submitted its original application to the U.S. Nuclear Regulatory Commission (NRC) for a license to construct, operate, and decommission a gas centrifuge uranium enrichment facility to be located near Idaho Falls, Idaho. An Environmental Report was also submitted by AES at that time. On April 24, 2009, AES resubmitted its application to request an increase in enrichment capacity.

If licensed, the facility would enrich uranium for use in manufacturing commercial nuclear fuel for use in power reactors. Feed material would be natural (not enriched) uranium in the form of uranium hexafluoride (UF_6), which contains the uranium-235 isotope. AES proposes to use centrifuge technology to enrich this isotope in the UF_6 to up to 5 percent by weight. The centrifuge would operate at below atmospheric pressure and would have a capacity up to 6.6 million separative work units (SWU). The enriched UF_6 would be transported to a fuel fabrication facility, while the depleted UF_6 would be stored onsite until it is sold, disposed of commercially, or taken by the U.S. Department of Energy.

In accordance with NRC regulations in 10 CFR Part 51 and the National Environmental Policy Act (NEPA), the NRC is preparing an Environmental Impact Statement (EIS) on the proposed facility as part of its decision making process. The EIS will examine the potential environmental impacts associated with the proposed AES facility in parallel with the review of the license application. In addition to the EIS, the NRC staff will prepare a Safety Evaluation Report (SER) on health and safety issues raised by the proposed action. The SER will document the NRC staff evaluation of the safety of the activities proposed by AES in its license application and the compliance with applicable NRC regulations.

On May 4, 2009, NRC published a Notice of Intent in the *Federal Register* (84 *Federal Register* 20508-20509) to prepare an EIS and to conduct the public scoping process, in accordance with the NEPA process. The scoping process is designed to help determine the range of actions, alternatives, and potential impacts to be considered in the EIS, and to identify significant issues related to the proposed action. The NRC solicits input from the public and other agencies in order to focus on issues of genuine concern.

On June 4, 2009, the NRC staff held a public scoping meeting in Idaho Falls, Idaho, to receive both oral and written comments from interested parties. The meeting began with the staff providing a description of the NRC's role, responsibilities, and mission. This was followed by an overview of the licensing process, including information on the safety review and environmental review processes. Also, NRC staff provided Information on the means for the public's participation. Most of the meeting time was spent taking comments from attendees regarding the scope of the environmental review.

After publishing the draft EIS, NRC will invite the public to comment on that document. NRC will announce the availability of the draft EIS, the dates of the public comment period, and information about the public meeting in the *Federal Register*, on NRC's AREVA Enrichment Services Gas Centrifuge Facility Web site (http://www.nrc.gov/materials/fuel-cycle-fac/arevanc.html), and in the local news media. After evaluating comments on the draft EIS, the NRC staff will issue a final EIS that will serve as the basis for the NRC's consideration of environmental impacts in its decision on the proposed enrichment facility.

This report summarizes the determinations and conclusions reached in the scoping process. It is organized into four main sections. Section 1 provides an introduction and background information on the environmental review process. Section 2 summarizes the comments and concerns expressed by government officials, agencies, organizations, and the public. Section 3 identifies the issues that the draft EIS will address, and Section 4 identifies issues that are not within the scope of the draft EIS. Where appropriate, Section 4 also identifies other occasions in the decision making process where issues that are outside the scope of the draft EIS may be considered.

2. ISSUES RAISED DURING THE SCOPING PROCESS

2.1 OVERVIEW

The public scoping process is an important component in determining the major issues that the NRC should address in the draft EIS. The comments provided by the public addressed several subject areas related to the proposed AES facility and the development of the draft EIS.

Members of the public were able to submit comments on the scope of the AES enrichment facility EIS by e-mail, postal mail, and by speaking and/or submitting written comments at the public scoping meeting held in Idaho Falls, Idaho, on June 4, 2009. The scoping period began on May 4, 2009 and ended June 19, 2009.

Comments were received from 131 individuals or organizations. Approximately 120 individuals not affiliated with the NRC attended the June 4, 2009, public scoping meeting.

Most of the scoping comments (89) were received by e-mail; 37 people provided oral comments at the scoping meeting (two of these had also sent e-mail comments); and 7 people sent their comments by postal mail. Some people used more than one submittal method; they were not counted twice. The scoping meeting transcript (ML 091980464) and the written comments are available on NRC's Electronic Reading Room Web site at http://www.nrc.gov/reading-rm.html.

In addition to private citizens, commenters included:

- Shoshone-Bannock Tribes
- A representative of the Governor of Idaho
- Representatives for Idaho's U.S. Senators
- A representative for the U.S. Congressman, 2nd District of Idaho
- Three members of the Idaho State House of Representatives
- A member of the Idaho State Senate
- The mayor of Idaho Falls
- U.S. Environmental Protection Agency, Region 10
- Greater Idaho Falls Chamber of Commerce
- Bonneville County Commissioners
- Representatives of other organizations and businesses, including:
  - A Partnership for Science and Technology
  - Auto Building Trade and Construction Council

– Carpenter and Millwright Local Union, No. 808
– Cooper, Roberts, Simonsen Associates
– Diversified Metal Products
– Eastern Idaho Regional Medical Center
– Forde Johnson Oil Company
– Friends of the Earth
– Grow Idaho Falls
– Healthy Environmental Alliance of Utah (HEAL Utah)
– Idaho Conservation League
– Idaho Falls Regional Development Alliance
– Idaho Families for the Safest Energy
– Idaho State University
– International Brotherhood of Electrical Workers, Local 449
– Mayor's Youth Advisory Council (Idaho Falls)
– Snake River Alliance
– Tri-Valley Cares

The following general topics categorize the comments received during the public scoping period:

- NEPA and public participation
- Need for the proposed facility
- Alternatives
- Ecology
- Air quality and climate
- Geology and seismicity
- Water
- Land use and visual resources
- Human health
- Nuclear waste and hazardous materials
- Socioeconomics and cost
- Cultural resources and environmental justice
- Transportation
- Accidents
- Nonproliferation and security issues
- Cumulative impacts, and
- Miscellaneous topics

In addition to raising important issues about the potential environmental impacts of the proposed facility, some commenters offered opinions and concerns that typically would not be included in the subject matter of an EIS – these include general opinions about AES or issues that are more appropriately considered in the SER. Comments of this type are taken into consideration by the NRC staff, but they do not point to significant environmental issues to be analyzed. Other statements may be relevant to the proposed action, but they have no direct bearing on the evaluation of alternatives or on the decision making process involving the proposed action. For instance, general statements of support for or opposition to the proposed project fall into this category. Again, comments of this type have been noted but are not used in defining the scope and content of the EIS.

Section 2.2 summarizes the comments received during the public scoping period. Most of the issues raised have a direct bearing on the NRC's analysis of potential environmental impacts.

2.2 SUMMARY OF ISSUES RAISED

General comments supporting the facility: Nearly 50 percent of commenters expressed general support for the project. Many commenters provided specific reasons for their support, including: (1) the need for a domestic supply of enriched uranium to power the Nation's current and future nuclear reactors; (2) the need to produce more nuclear energy, which would reduce greenhouse gases and reduce the country's dependence on foreign oil; (3) the region's qualified workforce and long history in nuclear-related research and development; (4) the safety and efficiency of centrifuge technology; (5) the benefits to employment and other economic factors; and (6) AREVA's track record regarding safe operations, environmental stewardship, and community relations.

General comments opposing the facility: Approximately 30 percent of commenters stated their opposition to the project; in general, they stated that the increased risks to people and the environment outweighed the economic benefits. Many commenters mentioned that they thought AREVA had a poor track record in France, specifically they claimed that there had been routine dumping of radioactive liquids into the English Channel and a series of recent (2008) radioactive leaks and spills that were not reported to the public in a timely manner. Some commenters claimed that AREVA's mining activities in Niger over the past 40 years had depleted the local drinking water and radioactively contaminated the ground in the nearby town.

General concerns: Several commenters who were supportive of the proposed action noted that there were legitimate questions about potential environmental impacts that must be addressed in the draft EIS. Many commenters identified specific resource areas for which impacts should be addressed in the draft EIS. These included socioeconomic issues, water and air quality, waste management, noise, land use, geology and soils, cultural and environmental justice, ecology, public and occupational health, transportation, and security infrastructure impacts. More details on these issues can be found in the following sections of this scoping summary report.

The NRC staff will consider the comments provided during development of the EIS for the facility.

2.2.1 NEPA and Public Participation

Several commenters requested that public meetings be held in additional locations across the State to provide people throughout Idaho with the opportunity to comment on the proposal. Boise was mentioned most often, with commenters stating that it was the State capital and main population center. Other Idaho locations mentioned included Twin Falls, Coeur d'Alene, and the Wood River Valley. One commenter requested that meetings also be held in the Greater Yellowstone ecosystem area (specifically Wyoming), since that region's tourist industry could be adversely affected by having a nuclear facility in the vicinity.

Commenters pointed out that the impacts of the enrichment facility would not be limited to the Idaho Falls region. Most frequently mentioned were the tax incentives for the AREVA project that some thought were passed by the Idaho State Legislature and would affect Idahoans statewide. Other reasons given were that regions outside of Idaho Falls could be affected by accidents at the facility and by radioactive waste disposal.

Commenters mentioned the need to provide a forum in which the public could discuss and be informed about the radioactive wastes that the facility would generate, how the wastes would be handled, and the differences between the enriched uranium used to power reactors and the enriched uranium used for bombs.

2.2.2 Need for the Proposed Facility

Several made the general comment that uranium enrichment was needed for clean energy (nuclear power). On the other hand, a number of commenters wanted the EIS to include an in-depth analysis of the actual need for the proposed enrichment facility. They stated that the analysis should consider current and projected worldwide uranium enrichment capacity, the continuing downblending of surplus highly enriched uranium (HEU) in Russia and U.S. weapons stockpiles, and the current and projected number of nuclear power plants. In addition, mixed oxide fuel should be analyzed as another fuel supply. One commenter asked if plutonium, thorium, or other nuclear fuels could displace existing or potential demand for enriched uranium - will there be enough fuel capacity to serve the needs of future nuclear power plants without constructing the proposed facility.

Several commenters questioned the need for the proposed enrichment facility, given that there are renewable energy sources (solar, wind, biomass, geothermal, and hydropower) that are more environmentally friendly than nuclear power. One commenter stated that energy-need projections should take energy conservation and increased energy efficiencies into account.

2.2.3 Alternatives

One commenter stated that all reasonable alternatives should be evaluated, including ones that are outside the legal jurisdiction of the NRC, and that the EIS should discuss the reasons for eliminating alternatives that are not evaluated in detail. Reasonable alternatives should include, but are not limited to, alternative sites and different enrichment techniques. The commenter asked that the environmental impacts of the proposed action and no-action alternative be presented in comparative form and that the impacts of each alternative action be listed with corresponding mitigation measures.

Another commenter wanted the increased downblending of U.S and Russian HEU, as well as plutonium- and thorium-based fuels, to be analyzed as alternatives to the Eagle Rock Enrichment Facility (EREF). The analysis should include costs and environmental impacts.

2.2.4 Ecology

A few commenters raised concerns about endangered and sensitive species in the vicinity of the proposed facility. They stated that the NRC should try to site facilities and infrastructure to avoid areas of critical habitat for species of concern and that a mitigation plan should be prepared for impacts that could not be avoided.

Commenters were particularly concerned about increased habitat fragmentation, since the project area contains habitat that is crucial to sagebrush obligate species. One commenter noted that the sagebrush steppe habitat is considered by Federal agencies as "imperiled" and an area of primary concern. One commenter specifically mentioned sage grouse, pygmy rabbits, sage thrasher, sage sparrow, and birds of prey and recommended avoiding construction in any designated areas or lands for special management for these species. This commenter also suggested that the project minimize impacts to big game winter habitat. There were also concerns about impacts to nesting habitat for migratory birds.

One commenter wanted further analysis of the impacts associated with the construction of two access roads from U.S. Highway 20 to the project site, specifically the additional risk associated with fire and the spread of invasive weeds.

2.2.5 Air Quality and Climate

Air quality: A few commenters were concerned about the potential release of radioactive, hazardous, and toxic materials into the air. Commenters asked that the EIS include the following: (1) detailed information about ambient air conditions, (2) data on emissions of criteria pollutants, (3) information about mitigation measures, (4) an equipment emissions mitigation plan to reduce particulates and emissions associated with construction activities, (5) an evaluation of radioactive and nonradioactive emissions, (6) details on the use and disposal of filters, and (7) information on air impacts associated with accidents. One commenter requested that the applicant include air monitoring and reporting plans, including guidance for public alerts and containment.

Climate change: One commenter stated that the EIS should discuss how climate change could potentially influence the proposed project area resources and vice versa, especially within sensitive areas. He mentioned, as examples, changes in hydrology, sea leave, weather patterns, precipitation rates, and chemical reaction rates.

2.2.6 Geology and Seismicity

Geology and soil: One commenter noted that construction of facilities and access roads may also inadvertently compact the soil or disturb it, thus compromising the ability of a site to handle the normal flow of organisms, nutrients, and toxic wastes. The commenter stated that the EIS analysis should include a detailed discussion of the "cumulative effects from this and other

projects on the hydrologic conditions of the project area." Another commenter suggested establishing citing criteria to minimize soil disturbances and erosion on steep slopes.

Seismicity: A commenter recommended that the EIS discuss the potential for seismic risk associated with uranium enrichment activities and how this risk would be evaluated, monitored, and managed. They suggested that a seismic map be referenced or included in the EIS. The commenter stated that uranium enrichment activities could cause increased earthquake activity in tectonically active zone. Another commenter noted that eastern Idaho sits on a geologically unstable fault zone extending across southern Idaho to Yellowstone.

2.2.7 Water

Several commenters expressed concerns about adverse impacts the proposed facility would have on both surface water and groundwater. Of particular concern was the Snake River aquifer, which is located below the proposed site. The fear was that nuclear waste stored at the facility would seep into the aquifer and contaminate the groundwater.

Some commenters were concerned that water used by the facility would deplete the groundwater supply. In addition to depleting the supply, a commenter noted that the pumping action could increase existing groundwater contamination caused by seepage of toxic and radioactive contaminants into the groundwater. On the other hand, a few commenters stated that the facility would use less water than current agricultural activities.

A commenter recommended that the potential impacts to groundwater and other drinking water sources be fully analyzed and that mitigation measures be identified for significant impacts. They also stated that the EIS should document the project's "consistency with applicable stormwater permitting requirements" and include a discussion of specific mitigation measures that may be needed to reduce "adverse impacts to water quality and aquatic resources."

2.2.8 Land Use and Visual Resources

One commenter noted that the proposed AREVA facility would be located within an area of ranching and farming. There were local concerns about trespass, dust, impacts on livestock, impacts to local wells and groundwater, and traffic. Another commenter mentioned using visual resource management guidelines as an example of ways to minimize negative impacts.

2.2.9 Human Health

There were some comments related to the human health risks associated with long-term exposure to small amounts of uranium; increased risk for childhood leukemia and general concerns about cancer rates were mentioned.

One commenter questioned whether the NRC and AREVA could "scientifically demonstrate the legal requirement that this plant will not expose any member of the public to more than 10 mrem in any given year." Exposure from waste disposal was specifically mentioned. This commenter wanted the EIS to include the following: (1) an explanation as to why uranium exposure has greater health effects than are presently calculated by NRC safety standards; (2) how the alpha recoil problem is addressed by the NRC, since "alpha emitters can leak through four HEPA filters in a

row, in excess of the 99.97 percent filtering rate used presently"; and (3) a response to the complaints in the report from Centers' for Disease Control and Prevention (CDC's) SENES group on the understatement of fluoride toxicity at Oak Ridge.

Another commenter wanted the EIS to describe the measures that would be taken to ensure that workers involved in the transport of radioactive materials would be protected, including those loading and unloading shipments.

2.2.10 Nuclear Waste and Hazardous Materials

Radioactive waste: Nearly 40 percent of the commenters mentioned the need to address the impacts (environmental and economic) associated with long-term storage of the nuclear waste that would be produced by the enrichment process. There were concerns that the proposed facility would be adding to the nuclear waste that is already being stored at Idaho National Laboratory, particularly since no permanent nuclear waste depository has been designated. Many commenters noted that depleted uranium is hard to store safely and becomes "more radioactive over time." Another commenter pointed out that, although the depleted uranium becomes more radioactive over time due to radioactive ingrowth, the level of radioactivity never exceeds that found in natural uranium ore deposits.

Commenters noted that the NRC is still in the process of preparing specific rules for the depleted uranium waste stream. One commenter stated that the draft EIS should include a discussion of the rulemaking process and how (or whether) the rulemaking and current licensing processes can proceed simultaneously.

Commenters wanted the draft EIS to consider the environmental impacts of a full range of disposition pathways for the depleted uranium tails, including currently available disposal sites and those that are proposed. The analyses should include indefinite storage of uranium hexafluoride, indefinite storage of some other conversion product, disposal at new-surface nuclear waste disposal sites, and disposal at deep geologic sites. Commenters wanted NRC to assess the costs of each alternative.

Some commenters asked that the draft EIS discuss the environmental impacts associated with recycle/reuse disposition pathways or deconversion of the waste to a safer form (to an oxide). They noted that the United States lacks an operational deconversion facility and that the two deconverson plants currently under construction may not be able to handle the added inventory from the Louisiana Energy Services plant in New Mexico and the proposed Eagle Rock facility.

One commenter stated that the draft EIS must provide a description of the financial assurance for the indefinite storage of the depleted uranium at the AREVA site.

Hazardous materials: A few commenters were concerned that hazardous materials from the facility would contaminate the air and water. One commenter stated that hazardous materials in retention basins have the potential to settle in sediments and be released into the air.

Commenters wanted the draft EIS to discuss the potential direct, indirect, and cumulative impacts of hazardous waste from construction and operation of the project, including waste types and volumes and transport, storage, disposal, and mitigation measures. There were also concerns about pollutants that could be associated with the ventilation system. One commenter

asked that subsequent environmental documentation include a management plan for toxic and hazardous materials.

2.2.11 Socioeconomics and Costs

Several commenters mentioned positive socioeconomic impacts that the facility would bring to the community, particularly jobs. One commenter stated that he had looked into the increased housing, schooling, and transportation needs that would be expected during construction and operations phases and determined that the region would be able to accommodate them.

Many people commented on the costs of building and operating the facility, which would be partly covered by tax subsidies and increased electricity rates; cost overruns and delays in France, Poland, and Finland were cited as examples.

One commenter wanted the draft EIS to provide an analysis of the global market for uranium, including a scenario in which nuclear plants do not expand beyond current numbers or even decline. Another commenter noted that the economies of the Teton Valley, Jackson, WY, and West Yellowstone into Cody, WY, are fairly dependent on tourism. He asked that the EIS look at how many new jobs and how much new money would be brought into the region if the same amount of money were used to create and support small businesses.

Other commenters asked about the ramifications of foreign ownership (see Section 2.2.17, miscellaneous topics).

2.2.12 Cultural Resource and Environmental Justice

Cultural resources: One commenter stated that the EIS should describe the process and outcome of government-to-government consultation between the NRC and each of the Tribal governments in the vicinity of the project, any issues raised, and how those issues were addressed.

Another commenter noted that the proposed facility would be in close proximity to the Fort Hall Indian Reservation and within the aboriginal territories of the Shoshone-Bannock Tribes. This commenter stated that they would like the Heritage Tribal Office (HeTO) to be part of the cultural surveys of the proposed site and to be notified of any inadvertent cultural or archaeological discoveries.

A third commenter pointed out that the proposed site is in an area of rich and relatively well-preserved prehistoric and historic resources, noting the Wasden site, which is within one mile of the project area, and the relatively undisturbed and abundant archaeological sites within Idaho National Laboratory and on public and private lands in the vicinity.

Commenters pointed out that mitigation for all culturally sensitive items needed to be done and asked that contractors and permanent employees be informed about cultural regulations and Federal laws concerning artifacts and retrieving and removing historic items.

One commenter wanted to know if AREVA will share information about transportation routes, hazards associated with shipment, and the number of shipments. He also wanted to know if AREVA would provide training to the Tribes Emergency Management and Response staff on identifying and responding to a transportation accident on the reservation.

Another commenter questioned the transportation route of product to and from the EREF and whether AREVA will share information regarding the number of shipments and hazards of the shipments, and whether the facility will provide training to the Tribes Emergency Management and Response staff to identify and respond to a transportation accident on the reservation.

Environmental justice: One commenter stated that the EIS should include an evaluation of environmental justice populations within the project area and should address the potential for disproportionate adverse impacts to minority and low-income populations. The commenter stated that the EIS should include: information describing the process used to inform communities about the project and the potential impacts on the communities; input received from the communities; and a description on how that input was used in project-related decisions. Another commenter stated that sensitive population exposure scenarios needed to be developed from the standpoint of both workers and members of the public.

2.2.13 Transportation

Some commenters asked that the EIS include an assessment of the impacts of the transportation of the facility's feedstock, product, and waste, and of transportation-related accidents, including transportation-related emissions and possible exposures. The EIS should also describe measures that will be taken to decrease the chances of a transportation accident involving radioactive material and to ensure that workers involved in the transport of radioactive materials will be protected, including those loading and unloading shipments. One commenter want the draft EIS to include information about what form the uranium will be in when it is transported to Idaho—yellowcake, gaseous uranium tetrafluoride, or uranium hexafluoride. Alternative transportation routes and modes should be analyzed; routes and modes that present a significant risk to the public and natural resources should be avoided.

One commenter stated that the EIS should provide information about the transportation of hazardous and toxic materials to and from the project site, including amounts, methods of transport, and the types of containment vessels.

Some commenters were concerned about traffic safety on portions of U.S. Highway 20 running from Idaho Falls to the proposed EREF. They pointed out that the highway already has safety issues, since it is used by large, slow-moving agricultural machinery with many access roads on both sides. The addition of construction workers and construction traffic would add to the already congested conditions and create an increased safety risk. Commenters asked that the EIS describe local transportation safety issues and suggest solutions. One commenter wanted further analysis of the impacts associated with the construction of two access roads from U.S. Highway 20 to the project site.

One commenter noted that AREVA workers would find themselves in competition for seating on airline flights that are already filled to capacity and suggested that the region pursue a carrier to establish a new service to Las Vegas.

2.2.14 Accidents

There were a few comments concerning accidents. One commenter wanted to know how AREVA would respond to accident scenarios on the proposed site and how the public would be informed. Another was concerned about transportation accidents resulting in the release of radioactive materials to the environment and asked that the EIS describe measures that will be taken to minimize the chances of this type of accident. A third commenter stated that the draft EIS must analyze the air impacts of all potential accidents. Note: Section 2.2.13 of this summary also discusses accidents.

2.2.15 Nonproliferation and Security Issues

Nonproliferation: Several commenters were concerned that uranium enrichment could lead to the production of nuclear bombs and wondered if the use of enrichment technology could undermine U.S. efforts involving international nonproliferation.

One commenter stated that since there is a potential connection between a facility's ability to enrich uranium to fuel grade and the ability to continue enrichment to weapons grade, a proliferation analysis must be included in the draft EIS. Another commenter asked for a nonproliferation impact assessment.

A commenter stated that the analysis must include "both a technical discussion and a discussion by the U.S. Departments of State and Energy and the White House of their efforts to curtail uranium enrichment elsewhere and whether or not those efforts are affected by commercial enrichment in this country." Another commenter wanted the EIS to explain why the International Atomic Energy Agency had not been involved in the project.

Security issues: Some commenters raised concerns about fissile material (which has the potential for nuclear bomb-making) getting into the hands of terrorists and hostile countries like Iran and North Korea. They pointed out that the AREVA facility as well as the nuclear materials shipments going to and from the facility were subject to attack. One commenter asked for a detailed accounting of AREVA's plans to secure its nuclear materials at the facility and during transport. Another commenter wanted an account of the environmental impact of sabotage to the fluoride gas supply. One commenter wanted AREVA to commit to donating money to increase the local police and fire departments.

2.2.16 Cumulative Impacts

One commenter stated that the draft EIS should include a detailed discussion of the cumulative effects from this and other projects on the hydrologic conditions of the project area. On a more general level, commenters wanted the EIS to identify the current condition, describe the trend in the condition, and predict the future condition for each resource that is at risk and/or significantly impacted by the proposed project before mitigation. The EIS should identify the resources that could experience cumulative impacts, the time period over which impacts could occur, and the geographic area impacted. Parties that would be responsible for avoiding, minimizing, and mitigating adverse impacts should be identified. Another commenter wanted the draft EIS to discuss the potential direct, indirect, and cumulative impacts of hazardous waste.

2.2.17 Miscellaneous Topics

Other potential facility operations: One commenter was concerned that AREVA would become involved in the re-enrichment of reprocessed uranium. The commenter wanted a clear statement in the draft EIS by AREVA that it would not engage in re-enrichment. If this statement could not be made, the commenter wanted the draft EIS to discuss the capacity of the plant to process contaminated reprocessed uranium, the measures to protect workers from additional radiation exposures, an analysis of unique waste streams, and the transportation risks associated with shipping the reprocessed uranium by land and sea.

Another commenter wanted the draft EIS to assess the use of the plant to separate other isotopes of uranium, such as U-233, or to purify uranium-contaminated materials.

Mining and milling operations: A few commenters wanted the EIS to fully analyze the "front end" impacts associated with the operation of the proposed enrichment facility. They wanted the draft EIS to look at the environmental and human health impacts in the communities where uranium mining and milling activities were occurring. It was noted that these activities would not likely be occurring in the United States.

Foreign ownership: A few commenters raised issues about the foreign ownership of AREVA. One commenter wondered who would pay in the event of an accident and if the United States Government would argue with France over damages. Another commenter wondered what would happen if AREVA went out of business and stated that AREVA could only survive financially if it was supported by the French government. The commenter stated that U.S. taxpayers would ultimately have to cover any damages resulting from accidents, nuclear waste, and other issues associated the facility. Another commenter was concerned that profits would go to France and not to the United States.

Facility design: One commenter advocated integrating International Atomic Energy Agency safeguards for the proposed facility at the design phase. Another commenter asked if the facility design had been approved by the NRC for use in the United States.

Comments on the Environmental Report and Safety Analysis Report: One commenter stated that AREVA had adequately addressed the safety and environmental issues in the Environmental Report submitted with the NRC application. Other commenters had areas of concern including: (1) the ability of the Idaho Falls fire department to provide timely support, given its distance from the proposed facility; (2) the adequacy of the emergency backup systems; (3) the transportation analysis; and (4) the impact analysis of ecological resources, particularly the pending Endangered Species Act listings of sage grouse and the pygmy rabbit. There was also a concern that the Environmental Report was not detailed enough to ensure the reduction of impacts or appropriate mitigation plans. Commenters asked that subsequent documents provide a more detailed analysis, particularly in the areas involving water, air, and public health.

One commenter stated that AREVA was pushing the NRC to exempt it from the requirement to provide decommissioning funding assurance for the licensed operating period of the facility. The commenter noted that the EREF Safety Analysis Report (SAR) excluded "escalation, contingency, interest, tails disposition, decommissioning, and any replacement equipment" in its cost estimates. The commenter wanted the draft EIS to discuss in detail the exemptions that were being considered, particularly those listed in the SAR.

Power usage: One commenter wanted the draft EIS to analyze an additional load that the AREVA facility would add to the power grid. Another commenter wanted a commitment to use renewable energy sources (including nuclear power) to run the facility.

Out of scope issues: A few commenters specifically asked that issues raised that were not directly related to the assessment of potential impacts of the project, or the decision making process, be dismissed from the draft EIS and discussed elsewhere.

3. SUMMARY AND CONCLUSIONS

3.1 SCOPE OF THE EIS AND SUMMARY OF ISSUES TO BE ADDRESSED

NEPA (Public Law 91-90, as amended), and the NRC's implementing regulations for NEPA (10 CFR Part 51), specify in general terms what should be included in an EIS prepared by the NRC staff. Regulations established by the Council on Environmental Quality (40 CFR Parts 1500-1508), while not binding on the NRC staff, provide useful guidance. The NRC staff has also prepared environmental review guidance to its staff for meeting NEPA requirements associated with licensing actions ("Environmental Review Guidance for Licensing Actions Associated with Office of Nuclear Material Safety and Safeguards (NMSS) Programs", NUREG -1748).

Pursuant to 10 CFR 51.71(a), in addition to public comments received during the scoping process, the contents of the draft EIS will depend in part on the environmental report. In accordance with 10 CFR 51.71(b), the draft EIS will consider major points of view and objections concerning the environmental impacts of the proposed action raised by other Federal, State, and local agencies, by any affected Indian tribes, and by other interested persons. Pursuant to 10 CFR 51.71(c), the draft EIS will list all Federal permits, licenses, approvals, and other entitlements which must be obtained in implementing the proposed action, and will describe the status of compliance with these requirements. Any uncertainty as to the applicability of these requirements will be addressed in the draft EIS.

Pursuant to 10 CFR 51.71(d), the draft EIS will include a consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives to the proposed action. In the draft analysis, due consideration will be given to compliance with environmental quality standards and regulations that have been imposed by Federal, State, regional, and local agencies having responsibilities for environmental protection. The environmental impact of the proposed action will be evaluated in the draft EIS with respect to matters covered by such standards and requirements, regardless of whether a certification or license from the appropriate authority has been obtained. Compliance with applicable environmental quality standards and requirements does not negate the requirement for NRC to weigh all environmental effects of the proposed action, including the degradation, if any, of water quality, and to consider alternatives to the proposed action that are available for reducing adverse effects. While satisfaction of NRC standards and criteria pertaining to radiological effects will be necessary to meet the licensing requirements of the Atomic Energy Act, the draft EIS will also, for the purposes of NEPA, consider the radiological and non-radiological effects of the proposed action and alternatives.

Pursuant to 10 CFR 51.71(e), the draft EIS will normally include a preliminary recommendation by the NRC staff with respect to the proposed action. Any such recommendation would be

reached after considering the environmental effects of the proposed action and reasonable alternatives, and after weighing the costs and benefits of the proposed action.

The scoping process summarized in this report will help determine the scope of the draft EIS for the proposed facility. The draft EIS will contain a discussion of the cumulative impacts of the proposed action. The development of the draft EIS will be closely coordinated with the SER prepared by the NRC staff to evaluate the health and safety impacts of the proposed action.

The goal in writing the EIS is to present the impact analyses in a manner that makes it easy for the public to understand. This EIS will provide the basis for the NRC decision with regard to potential environmental impacts. Significant impacts will be discussed in greater detail in the EIS, and explanations will be provided for determining the level of detail for different impacts. This should allow readers of the EIS to focus on issues that were determined to be important in reaching the conclusions supported by the EIS. The following topical areas and issues will be analyzed in the EIS.

- *Public and worker safety and health*. The draft EIS will include a determination of potentially adverse effects on human health that result from chronic and acute exposures to ionizing radiation and hazardous chemicals as well as from physical safety hazards. These potentially adverse effects on human health might occur during facility construction and operation. Impacts associated with the implementation of the proposed action will be assessed under normal operation and credible accident scenarios.

- *Alternatives.* The draft EIS will describe and assess the no-action alternative and other reasonable alternatives to the proposed action. Other reasonable alternatives to the proposed action will be considered such as alternative sites, enrichment sources, or technological alternatives to the proposed centrifuge technology.

- *Waste management.* The draft EIS will discuss the management of wastes, including byproduct materials, generated from the construction and operation of the EREF to assess the impacts of generation, storage, and disposition. Onsite storage of wastes will also be included in this assessment.

- *Depleted uranium disposition.* The draft EIS will address concerns about the depleted uranium hexafluoride material, or tails, resulting from the enrichment operation over the lifetime of the proposed plant's operation. These concerns include the safe and secure storage and ultimate removal of this material from Idaho, and potential conversion of UF6 to U3O8 and ultimate disposition.

- *Water resources.* The draft EIS will assess the potential impacts on groundwater quality and water use due to the implementation of the proposed action.

- *Geology and seismicity.* The draft EIS will describe the geologic and seismic characteristics of the proposed EREF site. Evaluation of the potential for earthquakes, ground motion, soil stability concerns, surface rupturing, and any other major geologic or seismic considerations that would affect the suitability of the proposed site will be addressed in the SER rather than in the draft EIS.

- *Compliance with applicable regulations.* The draft EIS will present a listing of the relevant permits and regulations that are believed to apply to the proposed EREF. These would include air, water, and solid waste regulations and disposal permits.

- *Air quality*. The draft EIS will make determinations concerning the meteorological conditions of the site location, the ambient air quality, and the contribution of other sources. In addition, the draft EIS will assess the impacts of the EREF's construction and operation on the local air quality.

- *Transportation.* The draft EIS will discuss impacts associated with the transportation of construction material, centrifuges, and feed and tails during both normal transportation and transportation under credible accident scenarios. The impacts on local transportation routes due to workers, large vehicles delivering needed equipment and materials, and vehicles removing waste from the proposed facility will be evaluated in the draft EIS.

- *Accidents.* The draft EIS will analyze the potential environmental impacts resulting from credible accidents at the EREF. The SER will assess the impacts associated with credible accidents at the proposed EREF, both from natural events and human activities. Based on the analyses, the EIS will summarize the potential environmental impacts resulting from credible bounding accidents at the proposed facility.

- *Land use.* The draft EIS will discuss the potential impacts associated with the changes in land use from predominately rangeland to industrial.

- *Socioeconomic impacts.* The draft EIS will address the demography, the economic base, labor pool, housing, utilities, public services, education, recreation, and cultural resources as impacted by EREF. The hiring of new workers from outside the area could lead to impacts on regional housing, public infrastructure, and economic resources. Population changes leading to changes to the housing market and demands on the public infrastructure will be assessed in the draft EIS.

- *Cost/benefits.* The draft EIS will address the potential cost/benefits of constructing and operating the EREF, and will discuss the cost/benefits of tails disposition options.

- *Cultural resources.* The draft EIS will assess the potential impacts of the proposed EREF on the historic and archaeological resources of the area and on the cultural traditions and lifestyle of Indian tribes.

- *Resource commitments.* The draft EIS will address the unavoidable adverse impacts, irreversible and irretrievable commitments of resources, and the relationship between local, short-term uses of the environment and the maintenance and enhancement of long-term productivity. In addition, associated mitigative measures and environmental monitoring will be presented.

- *Ecological resources.* The draft EIS will assess the potential environmental impacts of the proposed EREF on ecological resources including plant and animal species and threatened or endangered species or critical habitat that may occur in the area. As appropriate, the assessment will include an analysis of mitigation measures to address adverse impacts.

- *Need for the facility.* The draft EIS will provide a discussion of the need for the proposed EREF and the expected benefits.

- *Decommissioning.* The draft EIS will include a discussion of facility decommissioning and associated impacts.

- *Cumulative impacts.* The draft EIS will address the potential cumulative impacts from past, present, and reasonably foreseeable activities at and near the site.

4. ISSUES CONSIDERED OUTSIDE THE SCOPE OF THE ENVIRONMENTAL IMPACT STATEMENT

The purpose of an EIS is to assess the potential environmental impacts of a proposed action as part of the decision-making process of an agency-in this case, a licensing decision. As noted in Section 2.2, some issues and concerns raised during the scoping process are not relevant to the EIS because they are not directly related to the assessment of potential impacts or to the decision making process. The lack of in depth discussion in the EIS, however, does not mean that an issue or concern lacks value. Issues beyond the scope of the EIS either may not yet be ripe for resolution or are more appropriately discussed and decided in other venues.

Some of these issues raised during the public scoping will not be addressed in the EIS. Major categories of these issues not analyzed in detail in the EIS include nonproliferation concerns, security and safety issues, and credibility.

Some of these issues raised during the public scoping process for the proposed facility are outside the scope of the draft EIS, but they will be analyzed in the SER. For example, health and safety issues will be considered in detail in the SER prepared by NRC staff for the proposed action and will be summarized in the EIS. The draft EIS and the SER are related in that they may cover the same topics and may contain similar information, but the analysis in the draft EIS is limited to an assessment of potential environmental impacts. In contrast, the SER primarily deals with safety evaluations and procedural requirements or license conditions to ensure the health and safety of workers and the general public. The SER also covers other aspects of the proposed action such as demonstrating that the applicant will provide adequate funding for the proposed facility in compliance with NRC's financial assurance regulations.