

LESSONS LEARNED

U.S. DEPARTMENT OF ENERGY

QUARTERLY REPORT

September 1, 1999; Issue No. 20

For Third Quarter FY 1999

Proposed Arizona-Mexico Transmission Project Presents Challenges to NEPA Process and Analysis

By: Ellen Russell, *NEPA Document Manager, Fossil Energy*
with Carolyn Osborne, *Office of NEPA Policy and Assistance*

Fossil Energy (FE) is preparing an environmental impact statement (EIS) for what would be the first cross-border high-voltage transmission project to connect the main power delivery systems of the United States and Mexico (DOE/EIS-0307). EIS scoping has been complex. Through the scoping process, FE has identified and worked with many stakeholders to define a broad range of issues and new alternatives. As the NEPA process continues for this unique project in the sensitive southern Arizona environment, FE hopes to apply the lessons learned to build a strong basis for decision making and consensus.



Stakeholders fill the house at scoping meeting in Tubac, AZ. Tony Como (standing), Deputy Director of FE's Office of Coal and Power Import and Export, explains DOE's and NEPA's role in the proposed transmission project.

Proposed Project and Role of DOE and NEPA

In December 1998, Public Service Company of New Mexico (PNM) applied to DOE for a Presidential Permit, needed to construct and operate electrical transmission lines that cross the U.S. border. The PNM proposal, a business venture, would require building one or two high voltage (345-kilovolt AC or \pm 400-kilovolt DC) transmission lines, 75 to 150 feet high, spaced four to six towers per mile, in a single right-of-way 150 to 300 feet wide. The six alternative transmission corridors currently under consideration (shown in map, page 3) would extend from the high-voltage switchyard of the Palo Verde Nuclear Generating Station (about 40 miles west of Phoenix) to the city of Santa Ana in Sonora, Mexico, a distance of up to 300 miles. (In addition, as *Lessons Learned* goes to press, another corridor alternative may be developed.)

In deciding whether to issue a Presidential Permit for a proposed cross-border project, FE considers whether the project is consistent with the "public interest" and factors in both electric reliability and environmental impact information. Under the NEPA process, FE examines environmental impacts from all activities related to a cross-border proposal, not just those at a border. For the PNM proposal, these activities could include constructing and

continued on page 3

Inside *LESSONS LEARNED*

Welcome to the 20th Quarterly Report on lessons learned in the NEPA process. This issue includes a cumulative index for the past five years. Articles in this issue include:

- CEQ Memo on Non-Federal Cooperating Agencies 5
- EPA Guidance on Cumulative Impacts 5
- DOE NEPA Web Demonstration 6
- Publishing a Draft EIS on NEPA Web 7
- NAEP Conference 8
- Forest Service's Decision Protocol 9
- DOE-wide NEPA Contracts Update 10
- DOE Litigation Update 11
- Other Agency NEPA Cases 11
- EAs and EISs Completed this Quarter 13
- Other EIS-related Documents 14
- Third Quarter FY 1999 Questionnaire Results 15
- Cost and Time Facts 18
- Training Opportunities 18
- "Time is Money" (Or is It?) 19
- Recent EIS Milestones 21
- NEPA Lessons Learned Cumulative Index 22

Carol Borgstrom

Director
Office of NEPA Policy and Assistance

Clarification

The article entitled "Historic Preservation Section 106 Regulations Revised" in the June 1, 1999 issue of the *Lessons Learned Quarterly Report* indicated that tribal "consent" was needed for actions on, or that would affect historic properties on, tribal lands. Under the revised regulations (36 CFR Part 800) for implementing Section 106 of the National Historic Preservation Act, agencies are directed to make every effort to resolve adverse effects and reach agreement with all consulting parties. Section 800.7 of the revised regulations, however, specifies how to proceed when efforts to resolve adverse effects have failed. Although there is provision to proceed without agreement, the Office of Environment will help DOE Offices in any way it can toward achieving resolution.

Be Part of Lessons Learned

We Welcome Your Contributions

We welcome suggestions and contributed drafts for the *Lessons Learned Quarterly Report*. Draft articles for the next issue are requested by November 1, 1999. To propose an article for a future issue, contact Yardena Mansoor at yardena.mansoor@eh.doe.gov, or phone 202-586-9326.

Fourth Quarter Questionnaires Due November 1, 1999

Lessons Learned Questionnaires for NEPA documents completed during the fourth quarter of fiscal year 1999 (July 1 to September 30, 1999) should be submitted as soon as possible after document completion, but no later than November 1, 1999. The Questionnaire is available interactively on the DOE NEPA Web at <http://tis.eh.doe.gov/nepa/> under DOE NEPA Process Information.

For Questionnaire issues, contact Hitesh Nigam at hitesh.nigam@eh.doe.gov, or phone 202-586-0750.

Feedback on LLQR

Do you have a comment or a suggestion? Please submit feedback to either of the contacts listed above.

LLQR Online

Current and past issues of the *Lessons Learned Quarterly Report* are available on the DOE NEPA Web at <http://tis.eh.doe.gov/nepa/> under DOE NEPA Process Information.

LLQR Index

A cumulative index of the LLQR is provided in the September issue each year.

Transitions

Steven Frank now serves as the NEPA Compliance Officer for the Office of Environmental Management (EM). Mr. Frank, the Acting Director of EM's Office of Environmental and Regulatory Analysis, may be reached at steven.frank@em.doe.gov, or phone 202-586-7478.

Printed on recycled paper



Arizona-Mexico Transmission Project

(continued from page 1)

operating substations, switchyards, and transmission lines on Native American, Federal, state, and private lands in the United States, as well as in Mexico.

Public Scoping and Outreach Efforts

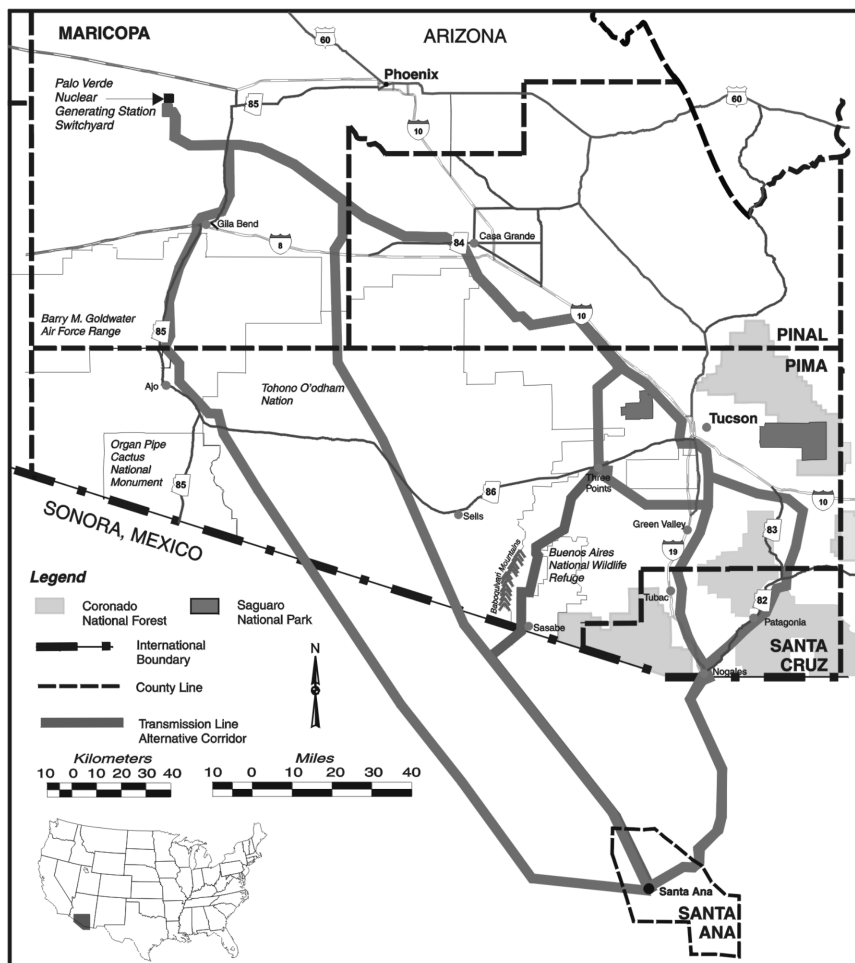
FE began the EIS process in February 1999 with a 60-day comment period, three alternatives, and about 60 potential stakeholder organizations. When the second scoping period ended five months later in July, about 500 people had attended 12 scoping meetings, the EIS scope had expanded to six alternatives, and the stakeholder list numbered about 1200. (See related item in *Lessons Learned Quarterly Report*, June 1999, page 2.)

FE has made extraordinary efforts to encourage such stakeholder interest and active participation. In addition to the Notice of Intent and initial mailings (based in part on the DOE NEPA Stakeholders Directory) to Native American, Federal, state, and local government officials and citizen organizations, FE distributed 2000 copies of a fact sheet in English and Spanish before the first set of scoping meetings. FE also had arranged for radio and newspaper announcements in both languages, established a toll-free number for this project, and created a Web page through its NEPA contractor where stakeholders can submit comments (<http://www.battelle.org/projects/pnmeis>).

During the first set of scoping meetings, however, stakeholders expressed concerns about both the scope of the EIS and public participation activities. Stakeholders along the alternative corridors proposed at that time pointed to

other apparently reasonable corridors and asked why these routes were not being considered. Stakeholders questioned the apparent lack of local benefits of the project, which would transmit U.S.-generated power directly to Mexico. Stakeholders also expressed concern that electric and magnetic fields from the proposed power lines could cause adverse health effects. Some stakeholders said they were dismayed to learn of the scoping meetings at the last minute or only by chance, and that the comment period was closing too quickly after the meetings.

FE responded by extending the scoping period, working with PNM to identify other apparently reasonable alternatives, and reopening the public scoping period in June, with additional meetings, for comment on an expanded set of alternatives. To better overcome the obstacles to reaching all potentially interested and affected stakeholders in southern Arizona (e.g., there are many seasonal residents, limited print media, and many remote households), FE asked a postal official to place fact sheets in each post office box.



Six alternative transmission corridors considered in the EIS extend about 140 to 230 miles in the U.S. and about 60 to 120 miles in Mexico, crossing Native American lands and lands managed by the Bureau of Land Management and other agencies.

continued on page 4

Arizona-Mexico Transmission Project

(continued from page 3)

Is It Possible to Go from Here to There Through Southern Arizona — Traversing a Sensitive Environment?

Placing and operating transmission lines would have significant impacts under any of the six alternatives currently being considered. Although the EIS analysis of impacts and mitigation measures is still ongoing, stakeholders have expressed strong concerns about a range of possible impacts that the EIS will need to describe objectively, thoroughly, and clearly.

High voltage transmission lines cause visual impacts, whether in isolated areas where they contrast with natural surroundings or in populated areas where people see them every day. Residents in many areas have stated that visibility impacts will lower property values, and they as well as residents along a state scenic highway and isolated routes predict tourism decreases.

Secretary of Energy Sees DOE, Private Sector Role in Developing Border Infrastructure

Speaking at the Third U.S.-Mexico Border Infrastructure Conference (June 2, 1999, at Tijuana, Mexico), Secretary Bill Richardson reflected on the commitment made five years ago – in the North American Free Trade Agreement (NAFTA) – to bring a better future to the border region. He outlined DOE and private sector activities that can be key to strengthening the region's infrastructure, emphasizing that “the private sector will play the most critical role to ensure that long-term energy needs are met.”

Referring to U.S. companies that have built natural gas supply lines to Mexico and to those that have applied for Presidential Permits for transboundary transmission lines, he stated that “the importance of the private sector is central to NAFTA's success and to the success of all of our border development efforts.”

At a later June meeting, Secretary Richardson and Mexico's Secretary of Energy reviewed options for optimizing the power connections between both countries. The Secretaries recognized the fundamental role of the energy sector in ensuring economic development and abating greenhouse emissions and stressed sustained joint efforts for the growth of an adequate, reasonably priced, environmentally responsible, and secure energy supply to the region.

Significant cultural and historic resources are found throughout southern Arizona. Generations of Native Americans have lived there, and parts of four proposed corridors cross the Tohono O'odham Nation. The Nation's Chairman has stated its opposition to any routing of the transmission lines across its lands and requested that DOE respect its sovereignty. Further, some of the proposed corridors may be near the Juan Bautista de Anza National Historic Trail, recently named a Millennium Trail, which traces a route followed by 16th and 17th century Spanish colonial soldiers and settlers.


In addition, parts of alternative corridors are near floodplains, known to be early settlement sites and expected to be rich in cultural resources.

Southern Arizona also contains the northern part of the Sonoran Desert, described as one of the largest intact arid ecosystems in the world, and an important part of Arizona's riparian habitat (e.g., along the Santa Cruz River). Hundreds of bird species live in or migrate through the area, which also contains habitat for many threatened or endangered species, including the recently identified critical habitat of the cactus ferruginous pygmy owl.

Looking Across the Border — Transboundary Impact Analysis

If the proposed project is permitted, one-fourth to one-half the length of the transmission line (about 60 to 120 miles) could be built in Mexico. PNM is preparing an environmental report required by Mexico, a *Manifestacion Impacto Ambiental*, which will present available information from professional sources. FE plans to summarize the *Manifestacion* in the draft EIS and incorporate it by reference as the means of analyzing transboundary impacts.

Next Steps

Assessing the impacts of six alternative corridors, each having several transmission and structure options, within a two-mile wide study corridor in the U.S. and Mexico, is proving to be a daunting task, and in the end might not optimally help focus stakeholder concerns nor DOE's decision making. FE is working with PNM and with Native American, Federal, state, and private citizen stakeholders to narrow the range of alternatives and options to those that are reasonable – practical or feasible from a technical and economic standpoint and using common sense – for analysis in the draft EIS. FE will apply the lessons from scoping – communicate broadly, listen to stakeholders, be open-minded and flexible – in this next step of the EIS process. 

CEQ Issues Memo on Non-Federal Cooperating Agencies




The Council on Environmental Quality (CEQ) on July 28, 1999, issued a memorandum urging Federal agencies to solicit more actively in the future the participation of non-federal agencies as cooperating agencies (40 CFR 1508.5) in an agency's EIS process.

"As soon as practicable, but no later than the scoping process," Federal agencies should identify state, tribal, and local government agencies that have jurisdiction by law or special expertise with respect to reasonable alternatives or significant impacts associated with a proposed action in an EIS. The Federal agency should then determine whether such non-federal agencies are interested in assuming the responsibilities of becoming a cooperating agency under 40 CFR 1501.6. If a non-federal agency agrees to become a cooperating agency, CEQ encourages agencies to document (e.g., in a memorandum of agreement) their specific expectations, roles, and responsibilities. Cooperating agencies are normally expected to use their own funds for routine activities; however, to the extent available funds permit, the lead agency should fund or include in its budget requests funding for major activities or analyses that it requests from cooperating agencies.

According to the CEQ memorandum, the benefits of granting cooperating agency status "include disclosure of relevant information early in the analytical process, receipt of technical expertise and staff support, avoidance

of duplication with state, tribal and local procedures, and establishment of a mechanism for addressing intergovernmental issues." CEQ reminds agencies that cooperating agency status neither enlarges or diminishes the decision making authority of either Federal or non-federal entities.

The Office of NEPA Policy and Assistance distributed copies of the CEQ memo to the DOE NEPA Compliance Officers in August. The CEQ memorandum is also available via DOE NEPA Tools module of the DOE NEPA Web (<http://tis.eh.doe.gov/nepa/>). For further information, contact Carolyn Osborne at carolyn.osborne@eh.doe.gov, or phone 202-586-4596. 

New NEPA Stakeholders Directory Issued

The Office of NEPA Policy and Assistance issued the 12th edition of the Directory of Potential Stakeholders for DOE Actions under NEPA on July 31, 1999. The Directory has been distributed and is available on DOE's NEPA Web at <http://tis.eh.doe.gov/nepa/tools/tools.htm>. This edition replaces the 11th edition, which should be recycled.


For further information, contact Katherine Nakata, Office of NEPA Policy and Assistance, at katherine.nakata@eh.doe.gov, or phone 202-586-0801.

EPA Issues Guidance on Reviewing Cumulative Impacts in NEPA Documents



The Environmental Protection Agency (EPA) issued guidance in May 1999 on the "Consideration of Cumulative Impacts in EPA Review of NEPA Documents." This guidance, based on the Council on Environmental Quality's handbook on "Considering Cumulative Effects Under the National Environmental

Policy Act" (January 1997), is intended for EPA's NEPA document reviewers and focuses on specific cumulative impact issues that are critical in EPA's review of NEPA documents under Section 309 of the Clean Air Act. EPA reviewers are to use this guidance in reviewing and commenting on DOE NEPA documents, particularly draft EISs.

The Office of NEPA Policy and Assistance distributed EPA's guidance to members of the DOE NEPA community in July. For more information, contact Carolyn Osborne at carolyn.osborne@eh.doe.gov, or phone 202-586-4596. 

DOE NEPA Web Demonstrated to Site-Specific Advisory Board Administrators

By: Lee Jessee, DOE NEPA Webmaster, Office of NEPA Policy and Assistance

On August 11, 1999, DOE NEPA Webmaster Lee Jessee guided a virtual tour (i.e., online and with telephone voice communication) of the DOE NEPA Web for Environmental Management (EM) Site-Specific Advisory Board (SSAB) Administrators during their monthly teleconference with the EM Office of Intergovernmental and Public Accountability. The Administrators support the activities of the SSAB, which routinely provides advice and recommendations on DOE NEPA documents through its 12 local Citizens Advisory Boards associated with DOE sites. Administrators of the local boards of five sites – Fernald, Idaho National Engineering and Environmental

Laboratory, Oak Ridge Reservation, Rocky Flats, and Savannah River – participated in the tour.

At EM's invitation and at the Board's request, Ms. Jessee showed the Administrators how to quickly identify and retrieve full texts of draft and final EISs, notices of intent and availability, records of decision, mitigation action plans, and EAs that various DOE Offices had issued. (DOE also publishes other NEPA-related documents on the NEPA Web, such as findings of no significant impact, supplement analyses, and floodplain and wetlands

continued on page 7

SSAB Facilitator Finds DOE NEPA Web Invaluable Tool and Recommends Tour

Lee Jessee received this e-mail message after the NEPA Web virtual tour. The author, Wendy Green Lowe of Jason Associates Corporation, is the Administrator and Facilitator for the INEEL Citizens Advisory Board.

Subject: NEPA Homepage orientation for SSAB Administrators

The Idaho National Engineering and Environmental Laboratory (INEEL) Citizens Advisory Board submits consensus recommendations transmitting their comments on virtually every National Environmental Policy Act (NEPA) document that addresses the INEEL. Staying on top of all of the NEPA documents progressing through DOE's system is very difficult.


The DOE NEPA homepage is an invaluable tool to me, the facilitator for the CAB. It helps me stay informed in an efficient manner. Lee Jessee's virtual tour of the homepage gave me confidence that I can access the homepage effectively and efficiently. I would recommend a virtual tour for anyone/ everyone who could benefit from touring the homepage routinely.

The search engine is a powerful tool for accessing countless NEPA documents. The ability to quickly review a document allows for a cost-effective way to determine its potential value, often avoiding a request for a hard copy that turns out to have limited usefulness. An unexpected surprise was all of the valuable links to other federal homepages.

(continued from page 6)

assessments.) Participants in the virtual tour practiced using the DOE NEPA Announcements module to obtain public hearing and schedule information, open e-mail links to NEPA Document Managers, and follow hyperlinks to full texts of *Federal Register* notices, draft EISs, and the Web resources of DOE Offices proposing the actions evaluated in the NEPA documents. Participants successfully opened portable document format (pdf) files in the DOE NEPA Process Information module, such as the Schedule of Key EISs, EIS/EA Status Chart, and

Lessons Learned Quarterly Reports. The virtual tour also demonstrated the Council on Environmental Quality's NEPANet (<http://ceq.eh.doe.gov/nepa/nepanet.htm>), and state and international environmental impact assessment resources.

For further information on the DOE NEPA Web or to arrange a virtual tour, contact Lee Jessee at lee.jessee@eh.doe.gov, or phone 202-586-7600. 

Publishing a Draft EIS on DOE NEPA Web; Timing is Key

Web publication of a draft EIS increases the document's accessibility at low cost and makes the draft available immediately for interested parties to browse, transfer, or print sections at will. To be most useful, though, a Web-published draft EIS should be accessible from the very beginning of the public comment period, which means that the document must be prepared for Web publication during the normally brief period between approval of the EIS and publication of the notice of availability.

To facilitate timely Web publication of a draft EIS on the DOE NEPA Web, we emphasize the following recommendations based on implementation of the NEPA Document Electronic Publishing Standards and Guidelines, issued October 1998. (See related article in the *Lessons Learned Quarterly Report*, September 1998, page 6.) While these tips apply to Web publishing for any kind of NEPA document, they are especially important to facilitate the public comment process for a draft EIS.

Tips for Success: Plan Early for Web Publishing

- *Use the Web Standards:* Start out right. Prepare and submit the electronic file of a NEPA document in Web-ready format: that is, portable document format (pdf) or hypertext markup language (html). Microsoft Word 6.0 and WordPerfect 6.0 and their more recent versions directly convert files to html. When a NEPA Document Manager transmits an electronic file in software that does not conform to these standards, the document cannot be directly posted on the Web.


Information on Web publishing standards is provided in the EH Electronic Publishing Standards and

Guidelines (updated April 1999) and the 1998 NEPA guidance referred to above, both available via the DOE NEPA Tools module of the DOE NEPA Web (<http://tis.eh.doe.gov/nepa/>).

- *Coordinate Early:* The NEPA Document Manager should coordinate early with the DOE NEPA Webmaster to identify technical and timing requirements.
- *Certify:* The NEPA Document Manager or NEPA Compliance Officer should complete a DOE NEPA Document Certification and Transmittal Form, also available via the DOE NEPA Tools module, to ensure that the DOE NEPA Webmaster receives the correct electronic file. *Please do not lock or password-protect these files because EH must open these files during publishing.*

Server Reports Available

The NEPA Compliance Officer or Document Manager may request a server report of electronic access to a draft EIS and other NEPA documents. The server report profiles users by country, region, city, state, province, and most active organizations, and indicates kilobytes downloaded or transferred to the user.

To coordinate Web publication of a draft EIS, to request a server report, or for further information on the DOE NEPA Web resources or Web publishing standards, contact Lee Jessee, DOE NEPA Webmaster, at lee.jessee@eh.doe.gov, or phone 202-586-7600. 



Kansas City NAEP Conference Explores NEPA Topics

The National Association of Environmental Professionals (NAEP) held its 24th Annual Conference June 20 to 24, 1999, in Kansas City, Missouri. As at its past conferences, NEPA was one of the main subjects. The conference included NAEP's Tenth Annual NEPA Symposium comprised of two panel discussions and 14 NEPA papers.

Good Internet Use Supports NEPA Public Involvement and Internal Coordination

Ahmed Mohsen, Bureau of Land Management, California, described using the Internet to improve agency compliance with NEPA. According to Mr. Mohsen, the versatility of the Internet makes it a potent tool for improving NEPA public involvement and interagency coordination. He described the Bureau's use of the Internet in preparing a joint Federal and state Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for a proposed gold mine in California (<http://www.ca.blm.gov/GoldenQueen/>). The NEPA team created a user-friendly Web Site to allow easy public access to the EIS/EIR, public and agency comments, project-related background and technical information, local news articles on the project, and notices of meetings and other public participation opportunities. A search engine helps readers locate subjects of interest in the NEPA document, and technical information is linked to illustrations, maps, and a glossary. Posting a broad range of relevant information on-line allows interested parties to make informed comments and better understand agency

Arizona Electric Power Cooperative Wins NEPA Award

Arizona Electric Power Cooperative (Arizona Power) received the NAEP Presidential Award for NEPA Excellence for a wildlife and recreation project that grew out of an EA for replacement of a power plant ash disposal facility. As the replacement project was partially funded by the U.S. Department of Agriculture's Rural Utilities Service, Arizona Power prepared the required NEPA document as an applicant. The disposal facility site is located next to the Apache Station Wildlife Area, the wintering location for 4,000 to 6,000 sandhill cranes. When EA preparation identified the site as an important bird watching area of great interest to the public, Arizona Power constructed a self-service public access viewing area.

responses, thus increasing the effectiveness of the public comment process.

NEPA document preparation requires tracking text changes and timely updating the EIS team of those changes. Posting administrative draft documents on a secure internal Web Site provides the EIS team with a communication infrastructure to increase coordination in document preparation. The effectiveness of conference calls can be increased dramatically if team members can access the same Web Site. BLM has used this method to improve internal communications for several EISs, including the Golden Queen EIS, where they estimate saving \$30,000 to \$40,000 in duplication costs alone. The procedure uses readily available software.

Mr. Mohsen also suggested using the Internet in the compliance and enforcement of permit conditions. Tracking of mitigation measures (implementation and success in reducing impacts) also can be automated with a program that links tasks with the mitigation schedule. This method allowed timely tracking of the mitigation measures implemented for the Golden Queen EIS, making the EIS a living document – virtually an electronic administrative record.

NAEP Activities

NAEP is a multidisciplinary, professional association founded in 1975, with 17 affiliated state and regional chapters and 20 university chapters. (See related articles in *Lessons Learned Quarterly Reports*, September 1998, page 9, and March 1998, page 9.) The organization publishes a quarterly research journal, *Environmental Practice*, and administers an environmental professional certification program. NEPA practitioners may be interested in NAEP's NEPA Working Group, which coordinates the annual NEPA Symposium, arranges NEPA training, develops and promotes improved techniques, and coordinates annual awards for NEPA practice.

Planning is underway for the 2000 NAEP Conference to be held June 25 to 29 in Portland, Maine. Abstracts will be due in October 1999. For more information on NAEP, to obtain a copy of the conference proceedings, or to inquire about membership, contact the organization's offices at 888-251-9902, or view <http://www.naep.org>. *The Office of NEPA Policy and Assistance thanks Lance McCold, Matt McMillen, Ahmed Mohsen, and Lucy Swartz for their contributions to this article.* LL

Forest Service's "Decision Protocol" Offers Structured Approach to Decision Making

By: Joy E. Berg, Forest Service, U.S. Department of Agriculture

Forest Service personnel presented this topic at the Kansas City NAEP conference (preceding page). This guest article reflects the Forest Service staff's wish to make their "Decision Protocol" available to other Federal agencies.

Picture a "typical" interdisciplinary team: while one person is describing the problem, another already has a proposed solution, a third is wondering how stakeholders and other agencies will react, another is questioning how the project will be financed, and another is predicting environmental effects. Where's the structure that brings these perspectives together?

It was thinking like this – plus a concern over a trend of increasingly frequent NEPA litigation – that helped launch the U.S. Forest Service's "Decision Protocol" about five years ago. Forest Service and Council on Environmental Quality staff with backgrounds in training, planning, NEPA, law, and decision science began to develop a series of questions that a team leader or facilitator could ask in order to organize decision making. After pilot testing on some 20 proposed projects across the country, the Forest Service issued Decision Protocol 2.0 in April 1999 for optional use in its projects.

What is a High Quality Decision?

Adapted from "The Protocol and Decision Quality" in the "Roadmap to the U.S. Forest Service Decision Protocol," available at <http://www.fs.fed.us/forum/nepa/dp2roadmap.htm>.

The Forest Service "Decision Protocol" is based on the belief that a high quality decision:

- Accurately describes the problem and the criteria for solving it
- Uses available information effectively
- Collects new information wisely
- Generates and chooses from a wide range of alternatives
- Distinguishes facts, myths, values, and unknowns
- Describes consequences associated with alternative solutions
- Leads to choices that are consistent with organizational, stakeholder, personal or other important values

A System for Planning and Streamlining the NEPA Process

The protocol is a question-based, administrative aid that helps decision making teams within the Forest Service manage and document their reasoning. When a Forest Service project is subject to NEPA review, the Decision Protocol can help in planning for and meeting the applicable requirements. Scoping, for example, has become more productive because "the protocol allows us to ask better questions, and better helps us understand what the public gives us," according to Rhey Solomon, Assistant Director for Ecosystem Management Coordination. Following the protocol can help improve decision rationale, information collection and use, and interactions among team members and decision makers, thereby simplifying the production of EAs and EISs and improving their content.

Five Cycles in the Decision Process

Decision Protocol 2.0 is organized around five "cycles" – Process, Problem, Design, Consequences, and Action – each with its own outcome.

- **Process.** *This cycle – in which the team determines the decision to be made, how it may be implemented, and potential constraints – results in a decision process roadmap that the team agrees to follow.*
- **Problem.** *This cycle results in setting the context through verbal and graphic depictions of the situation, a set of goals and objectives, and a description of the information base, including uncertainties and gaps. The team organizes available information and describes the situation in biological, social, economic, and other terms. The team also evaluates the reasons for taking action, the perspectives of stakeholders, the strength of available information, and the need for additional expertise.*
- **Design.** *This cycle results in a proposal description. The team proposes activities to accomplish the objectives, combines these into alternatives, and describes cause-and-effect relationships. The team also considers refinements – for example, mitigation measures – to respond to expected consequences. In this cycle, the team also develops monitoring measures to evaluate performance and guide adaptive responses, and identifies stakeholders to be consulted.*

continued on page 10

Forest Service's Decision Protocol


(continued from page 9)

- **Consequences.** *This cycle results in a set of refined alternatives and their expected consequences.* The team considers interactions among proposed activities and other projects, uncertainties, and design changes that could affect key consequences.
- **Action.** *This cycle results in a comparison of alternatives, a rationale for the preferred alternative, and an implementation plan.* The team compares alternative proposals for meeting objectives and avoiding adverse effects, and considers factors such as cost and feasibility. The team chooses (or hybridizes) a preferred design, develops a logical, defensible rationale for the choice, and examines the sensitivity of the choice to changes in assumptions. The team then develops plans for implementation and monitoring activities to guide future adaptation and problem solving.

Applications of the Protocol

The Decision Protocol is being used in tandem with the development of EAs and EISs for several Forest Service projects, including the analysis of 100 routes for off-road

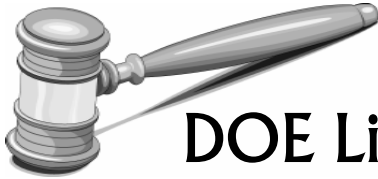
vehicle use in the Grand Mesa-Uncompaghre National Forest in Colorado. An unexpected bonus of using the protocol became apparent when there was a change in NEPA team membership: all the information a new member needed to get up to speed was readily available and well organized. EIS teams are currently using the Decision Protocol for two integrated resource projects in the Modoc National Forest in California. In the Wenatchee National Forest in Washington, a Ranger District used the protocol to decide how to redesign their National Register-listed office to be barrier-free. The "protocol skeptic" on the team offered to draft the EA. He later reported that it was the easiest EA he had ever written: all the information needed was contained in the results of the Decision Protocol. The NEPA team responsible for this EA has estimated a time savings of about 40 percent from the use of the protocol.

The Forest Service's Decision Protocol 2.0 can be found at <http://www.fs.fed.us/forum/nepa/dp2roadmap.htm>. For more information, contact Joy Berg at berg_joy/wo@fs.fed.us, or phone 202-205-1277. 

DOE-wide NEPA Contracts Update

These recently awarded tasks have not been previously reported here. For more information on the DOE-wide NEPA contracts, contact Dawn Knepper at knepper@doeal.gov, or phone 505-845-6215. For a complete list of tasks to date, see *Lessons Learned Quarterly Reports*, June 1998, page 6; September 1998, page 7; March 1999, page 9; and June 1999, page 11.

Task Description	DOE Contact	Date Awarded	Contractor Team
Environmental Studies – 2 tasks	Los Alamos National Laboratory	1/99 – 3/99	Tetra Tech, Inc.
Environmental Studies – 5 tasks	Federal Energy Regulatory Commission	4/99 – 6/99	Tetra Tech, Inc.
Idaho High-Level Waste and Facilities Disposition EIS – Incidental Waste and HLW Tank Closure Studies	Tom Wichmann, ID 208-526-0535 wichmatl@inel.gov	4/22/99	Tetra Tech, Inc.
High-Level Waste Salt Disposition Alternatives Supplemental EIS and Radiological Performance Assessment	Larry Ling, SR 803-208-8248 l.lingl@srs.gov	4/29/99	Tetra Tech, Inc.
NEPA Document Support (Office of River Protection)	Jon Peschong, RL 509-376-9327 jon_c_peschong@rl.gov	6/05/99	Tetra Tech, Inc.
Idaho High-Level Waste and Facilities Disposition EIS – INEEL Facility Prevention of Significant Deterioration Baseline and Contingency Air Analysis and Non-Involved Worker Dose Re-Baseline	Tom Wichmann, ID 208-526-0535 wichmatl@inel.gov	6/17/99	Tetra Tech, Inc.
Environmental Studies	Federal Energy Regulatory Commission	7/7/99	Battelle Memorial Institute



DOE Litigation Update

Court Cannot Require an EIS for Part of a CERCLA Action; Remaining Portion of Lawsuit over Oak Ridge's Metal Recycling is Dismissed


The U.S. District Court for the District of Columbia in June 1999 declined to order DOE to prepare an EIS for recycling and selling radioactively contaminated metal resulting from the decontamination and decommissioning of three buildings at Oak Ridge's East Tennessee Technology Park (formerly the K-25 Gaseous Diffusion Plant). (See *Lessons Learned Quarterly Reports*, September 1998, page 11; December 1997, page 17.)

The plaintiffs, Oil, Chemical and Atomic Workers International Union and others, initially sought an EIS for the decontamination and decommissioning action, including possible recycling and sale of the resulting contaminated metal. In June 1998, Judge Gladys Kessler found that decontamination and decommissioning is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) removal action and dismissed that portion of the suit, because CERCLA Section 113(h) prohibits legal challenges to a removal or remediation action selected to clean up a site until the action has been completed. However, she allowed the portions of the suit concerning the recycling and sale, which she then considered to be an optional action (not an "organic element" of the CERCLA action), to proceed to trial to determine whether an EIS should be prepared.

The plaintiffs argued that the decision to recycle radioactive metal is an action subject to NEPA, independent of the ongoing CERCLA removal action at the site. The court, however, in reconsidering its earlier

ruling in light of additional information, determined that the recycling was an integral part of the overall CERCLA action. Judge Kessler noted that nearly every court to address the scope of Section 113(h) has concluded that litigation that interferes with even the most tangential aspects of a cleanup action is prohibited, and she believed that the record showed that the metal recycling option had long been regarded as an integral part of the cleanup action.

Judge Kessler's opinion stated that "if recycling were outside the scope of 113(h), the proposed plan is exactly the type of action which would come within the scope of NEPA." She also concluded that there is potential for environmental harm from the recycling project, a lack of a national standard governing the unrestricted release of contaminated metals, and that plaintiffs and intervenors "raised legitimate concerns as to the lack of public notice and comment surrounding the entire process by which Defendants settled on recycling as a disposal method." *Oil, Chemical and Atomic Workers International Union, AFL-CIO, et al., v. Peña*, (Civil Action No. 97-1926, U.S. District Court for the District of Columbia, Filed June 29, 1999).

In response to the decision, in an August 11 letter, some 185 public interest, labor, environmental, and antinuclear organizations asked Vice President Gore to stop the proposed recycling project. 

Other Agency NEPA Cases

Timing and Applicability of Categorical Exclusion for "Bioprospecting" Challenged, Based on Administrative Record and Agency NEPA Procedures

The U.S. District Court for the District of Columbia ordered the Department of the Interior to suspend a Cooperative Research and Development Agreement with a biotechnical company pending completion of an EA or an EIS. The company was "bioprospecting" microbial organisms in Yellowstone National Park – i.e., sampling biological resources within the unique Park ecosystems in search of commercially valuable genetic materials. Under the agreement, the Park was to receive annual fees for bioprospecting rights and royalties on any future commercial use or products.

The Department of the Interior argued that the activities being performed under the agreement fell under its categorical exclusion for "day-to-day resource management and research activities." The court, however, expressed doubt concerning the applicability of the Department's categorical exclusion (and the timing of its application) and ordered Interior to suspend the bioprospecting pending completion of an EA or an EIS.

While the court made clear that it did "not intend to establish a requirement that an agency prepare a full-blown statement of reasons" when applying a categorical exclusion, it held that "a post hoc assertion" of a categorical exclusion "during litigation, unsupported by any evidence in the administrative record or elsewhere that such a determination was made at the appropriate time, cannot justify a failure to prepare either an EA or an

continued on page 12

Other Agency NEPA Cases (continued from page 11)

EIS.” Further, the court indicated that, even if the Department had invoked the categorical exclusion at the appropriate time, such a position might still not have survived judicial review under the arbitrary and capricious standard because (1) the commercial exploitation of natural resources is probably not equivalent to “day-to-day resource management and research activities” and, more importantly, (2) the activities involve extraordinary circumstances associated with “unique geographic characteristics” and “ecologically significant or critical areas,” thus making the activities ineligible for categorical exclusion under Interior’s own Departmental Manual. *Edmonds Institute v. Department of the Interior*, No. 42 F. Supp. 2d 1, 1999 U.S. Dist. LEXIS 4168 (D.D.C. March 24, 1999).

Environmental Assessment and Administrative Record Inconsistent with FONSI

The U.S. District Court for the District of Montana found that the Department of Transportation, Department of the Interior, Federal Highway Administration, and National Park Service violated NEPA by issuing a Finding of No Significant Impact (FONSI) rather than preparing an EIS for a parking lot at Glacier National Park, Montana.

The controversy involved the potential impacts of a proposed parking lot on a site that contains 500-year-old cedars and other rare and vulnerable vegetation. Construction of the parking lot would require removing some cedars, resulting in impacts that the administrative record characterized as “significant in light of the cumulative impacts that have occurred and the extreme rarity of the habitat involved.” The draft and final EAs also contained statements regarding significance of impacts that implied that an EIS was needed to consider the project’s impacts on unique resources. Further, the court noted that although the original FONSI identifies only nine important trees that would be removed, other Park Service analysis identified about 200 important trees likely to be removed. The court found the FONSI inadequate and the Park Service’s decision to proceed without an EIS was arbitrary and capricious.


In its decision, the court also addressed the issue of mitigation, noting that an agency “may reach a FONSI if mitigation measures are proposed that directly address the impacts identified in the Environmental Assessment.” In this case, however, the type of mitigation proposed by the Park Service – removal of a nearby picnic area and its regeneration as forest (which, the court noted, would take more than 500 years if it was even possible) – lacked “the scientific analysis and supporting data to constitute sufficient mitigation to support a FONSI.” The court enjoined the agencies from implementing actions in connection with this case until an EIS had been completed. *Coalition for Canyon Preservation and Wildlands Center for Preventing Roads v. Department of Transportation*, No. CV 98-84-M-DWM, 1999 U. S. Dist. LEXIS 835 (D. Mont. January 19, 1999).

Bridge EIS Remanded; Agency Must Analyze Alternatives, Take “Hard Look” at Impacts, Identify Historic Properties

The U.S. District Court for the District of Columbia ordered the Department of Transportation’s Federal Highway Administration (FHWA) not to begin implementing its decision to replace the congested and deteriorating Woodrow Wilson Memorial Bridge (a Potomac River crossing between Maryland and Virginia that serves as part of the Washington, D.C., Beltway and Interstate Highway 95) before meeting its obligations under NEPA and several other laws. Among other conclusions, the court found that the FHWA violated NEPA by failing to analyze all reasonable alternatives and by failing to take the required “hard look” at the environmental impacts.

FHWA’s 1991 Draft EIS considered repairing the bridge (the “no-build” alternative – in effect, a “no action” alternative) and six alternatives to build a new river crossing. The six “build” alternatives all considered designs with 12 or more lanes. Acknowledging deficiencies regarding traffic assumptions and analysis of construction and regional impacts in its 1991 Draft EIS, the FHWA reopened scoping and issued a 1996 Supplemental Draft EIS and 1997 Final EIS that again considered six build alternatives, each with 12 lanes but differing in form (bridge or tunnel) and exact location. In its 1997 Record of Decision, the agency documented its selection of two parallel drawbridges with six lanes each.

The court criticized the FHWA for not assessing an apparently reasonable ten-lane alternative – a design the agency had used to characterize the project for purposes of its Clean Air Act conformity determination. The court found that FHWA also failed to take the required “hard look” at the reasonably foreseeable impacts of construction activities: the “terse summaries” provided in the EIS “do not come close to providing the public with the kind of information necessary to weigh the environmental costs and benefits of the project.” In addition, the court found that FHWA failed to meet its obligations under Section 106 of the National Historic Preservation Act (NHPA), for example, by not completing identification of potentially affected protected historic properties; the bridge stands four blocks south of the National Historic Landmark District of the City of Alexandria. Issuing a ROD that approves a project while postponing full compliance with the NHPA would, according to the court, vitiate the requirements of NHPA because project design could commence without knowledge of the extent of needed mitigation.

The court remanded this matter for further agency action. *City of Alexandria, Virginia, and Alexandria Historic Restoration and Preservation Commission v. U.S. Department of Transportation*, No. 46 F. Supp. 2d 35, U. S. Dist. LEXIS 5254, (D.D.C. April 13, 1999). 

EAs and EISs Completed April 1 – June 30, 1999

EAs

Amarillo Area Office/Defense Programs

DOE/EA-1190 (5/27/99)
Pantex Plant Waste Water Treatment Facility Upgrade, Texas

Cost: \$115,000
Time: 31 months

Bonneville Power Administration

DOE/EA-1282 (5/07/99)
Mid-Columbia Coho Restoration Feasibility Project, Washington

Cost: \$62,000
Time: 6 months

Chicago Operations Office/Science

DOE/EA-1267 (4/14/99)
Proposed 8 GeV Fixed Target Facility at the Fermilab Booster and Booster Neutrino Detectors at Fermi National Accelerator Laboratory, Batavia, Illinois

Cost: \$34,000
Time: 10 months

Los Alamos Area Office/Defense Programs

DOE/EA-1269 (6/25/99)
Decontamination and Volume Reduction System Project at Los Alamos National Laboratory, New Mexico

Cost: \$52,000
Time: 12 months

Ohio Field Office/Environmental Management

DOE/EA-1273 (4/20/99)
Proposed Final Land Use at the Fernald Environmental Management Project Site, Ohio

Cost: \$28,000
Time: 8 months

DOE/EA-1239 (6/18/99)

Disposition of Mound Plant's South Property, Ohio

Cost: \$67,000
Time: 20 months

Oak Ridge Operations Office/Nuclear Energy

DOE/EA-1299 (4/13/99)
Receipt and Storage of Uranium Materials from the Fernald Environmental Management Project Site, Ohio

Cost: \$95,000
Time: 4 months

Richland Operations Office/Environmental Management

DOE/EA-1135 (5/06/99)
Offsite Thermal Treatment of Low-Level Mixed Waste, Hanford Site, Richland, Washington

Time: 43 months
[Note: The costs of this EA were paid by the applicant; therefore, cost information does not apply to DOE.]

Rocky Flats Field Office/Environmental Management

DOE/EA-1292 (3/22/99)
Onsite Treatment of Low-Level Mixed Waste at the Rocky Flats Environmental Technology Site, Colorado (not previously reported in Lessons Learned)

Cost: \$33,000
Time: 10 months

DOE/EA-1293 (5/04/99)

Vegetation Management at the Rocky Flats Environmental Technology Site, Colorado

Cost: \$27,000
Time: 9 months

Savannah River Operations Office/Environmental Management

DOE/EA-1205 (4/28/99)
Implementation of the Wetland Mitigation Bank Program at the Savannah River Site, Aiken, South Carolina

Cost: \$26,000
Time: 24 months

Final EISs

Science/Oak Ridge Operations Office

DOE/EIS-0247 (EPA Rating: EC-2)
Construction and Operation of the Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee

April 1999 (64 FR 19999; 4/23/99)

Cost: \$2.1 million
Time: 21 months

Western Area Power Administration

DOE/EIS-0294 (EPA Rating: EO-2)
Sutter Power Plant and Transmission Line Project, California

April 1999 (64 FR 19999; 4/23/99)

Time: 14 months

[Note: The costs of this EIS were paid by the applicant; therefore, cost information does not apply to DOE.]

ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS

Environmental Impact of the Action

LO– Lack of Objections

EC– Environmental Concerns

EO– Environmental Objections

EU– Environmentally Unsatisfactory

Adequacy of the EIS

Category 1 – Adequate

Category 2 – Insufficient Information

Category 3 – Inadequate

(See the March 1997 *Lessons Learned Quarterly Report* for a full explanation of these definitions.)

Other EIS-related Documents, April 1 – June 30, 1999

Notices of Intent

DOE/EIS-0283
Supplement to the Draft Surplus Plutonium Disposition Programmatic
4/06/99 (64 FR 16720)

DOE/EIS-0280
Proposed Clean Power from Integrated Coal/Ore Reduction Project (CPICOR) at Vineyard, Utah
6/28/99 (64 FR 34640)

Draft EISs

DOE/EIS-0281
Sandia National Laboratories Site-wide, Albuquerque, New Mexico
April 1999 (64 FR 18900; 4/16/99)

DOE/EIS-0222
Hanford Remedial Action and Comprehensive Land Use Plan, Hanford Site, Richland, Washington
April 1999 (64 FR 19999; 4/23/99)

DOE/EIS-0283
Supplement to the Draft Surplus Plutonium Disposition Programmatic
April 1999 (64 FR 26410; 5/14/99)

Records of Decision

DOE/EIS-0290
Advanced Mixed Waste Treatment Project, Idaho National Engineering and Environmental Laboratory
4/07/99 (64 FR 16948)

DOE/EIS-0251 (also relates to DOE/EIS-0203)
Multi-purpose Canister or Comparable System for Idaho National Engineering and Environmental Laboratory Spent Nuclear Fuel
5/04/99 (64 FR 23825)

DOE/EIS-0297
Griffith Power Plant and Transmission Line Project, Mohave County, Arizona
5/28/99 (64 FR 29023)

DOE/EIS-0294
Sutter Power Plant and Transmission Line Project, California
6/15/99 (64 FR 32041)

DOE/EIS-0247
Construction and Operation of the Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee
6/30/99 (64 FR 35140)

Consolidated ROD for the following EISs:

DOE/EIS-0288
Production of Tritium in a Commercial Light Water Reactor

DOE/EIS-0270
Accelerator Production of Tritium at the Savannah River Site, Aiken, South Carolina

DOE/EIS-0271
Construction and Operation of the Tritium Extraction Facility at the Savannah River Site, Aiken, South Carolina
5/14/99 (64 FR 26369)

Supplement Analyses

DOE/EIS-0169-SA-01
Fall Chinook and Coho Salmon Research Program for the Yakima River Basin Fisheries Project EIS
(Decision: No further NEPA review required); June 1999

DOE/EIS-0246-SA-04
Southern Idaho Wildlife Mitigation – Krueger Acquisition (Partial Mitigation for Black Canyon), Wildlife Mitigation Programmatic EIS in Idaho, Montana, Nevada, Washington, and Oregon
(Decision: No further NEPA review required); April 1999

DOE/EIS-0246-SA-05
Albeni Falls Wildlife Mitigation Project: Boundary Creek Acquisition Project, Wildlife Mitigation Programmatic EIS in Idaho, Montana, Nevada, Washington, and Oregon
(Decision: No further NEPA review required); May 1999

DOE/EIS-0246-SA-06
Steigerwald Lake Property Acquisition, Wildlife Mitigation Programmatic EIS in Idaho, Montana, Nevada, Washington, and Oregon
(Decision: No further NEPA review required); June 1999

DOE/EIS-0265-SA-13
Mitigate Effects of Runoff and Erosion on Salmonid Habitat in Pine Hollow Watershed, Watershed Management Program in Oregon, Idaho, Washington and Montana EIS
(Decision: No further NEPA review required); April 1999

Withdrawal of Notice of Intent

DOE/EIS-0302
Transfer of the Heat Source/Radioisotope Thermoelectric Generator Assembly and Test Operations from the Mound Site
5/18/99 (64 FR 26954)

Third Quarter FY 1999 Questionnaire Results

What Worked and Didn't Work in the NEPA Process

To foster continuing improvement in the Department's NEPA Compliance Program, DOE Order 451.1A requires the Office of NEPA Policy and Assistance to solicit comments on lessons learned in the process of completing NEPA documents and distribute quarterly reports. This Quarterly Report covers documents completed between April 1 and June 30, 1999. Comments and lessons learned on the following topics were submitted by questionnaire respondents.

The material presented here reflects the personal views of individual questionnaire respondents, which (appropriately) may be inconsistent. Unless indicated otherwise, views reported herein should not be interpreted as recommendations from the Office of Environment, Safety and Health.

Scoping

What Worked

- *Internal scoping.* An internal scoping meeting enabled the preparation of concise documents.
- *Working with legal counsel.* The NEPA document manager worked closely with the field office's legal counsel to define the scope of the EA.
- *Working with local government.* Project personnel worked with local government agencies to develop alternatives for the proposed action.
- *Alternative design.* The initial scope was changed because an environmental program staff member suggested a more "environmentally friendly" alternative. During the course of EA preparation, the scope changed again when the EA team and DOE staff suggested changes that improved the project.

Data Collection/Analysis

What Worked

- *Geographic Information Systems (GIS).* Use of GIS data from other agencies assisted in data collection.
- *Use of applicant data.* The process relied on project information and impact analyses that the project applicant was required to submit. DOE and the responsible state agency then independently reviewed this information.
- *Use of site future use plans.* Plans for future uses of the site helped to define potential commercial operations at the site and bound the consequent potential impacts of changing site uses.

What Didn't Work

- *Disparities in data from multiple sites.* Wide disparities in the data available from multiple DOE sites made it difficult to compare alternative sites.

Schedule

Factors that Facilitated Timely Completion

- *In-house production resources.* Using in-house printing and distribution resources facilitated timely completion of the EIS.
- *Use of scheduling software.* Using commercial project management software helped keep the NEPA process on schedule.
- *A dedicated editor.* An excellent writer-editor kept everyone on track and reminded team members to submit information on time.
- *NEPA Compliance Officer involvement.* The involvement of the NEPA Compliance Officer, who also served as the NEPA Document Manager, from beginning to end facilitated timely completion of the EA.
- *Extra time on scoping.* Some extra time spent defining the scope made the impact analysis more effective and efficient.

Factors that Inhibited Timely Completion

- *Low priority for the proposed action.* The EA was placed on hold whenever there were NEPA actions of higher priority.
- *Ending scoping early.* The scoping process closed before supporting studies were completed, resulting in a need to back track and add new project components and alternatives.
- *Lack of clear direction.* Not having a clear definition of the minimum required information for the EIS, and conflicting review comments, made timely completion difficult.
- *Joint Federal-state responsibility.* Developing the EIS as a joint document with a state agency tied the EIS schedule to the process and schedule requirements of the state agency's siting process.

continued on page 16

Third Quarter FY 1999 Questionnaire Results

What Worked and Didn't Work in the NEPA Process

(continued from page 15)

- *Unresolved policy issues.* Unresolved policy issues and disagreements about potential impacts among Tribes and state and Federal resource agencies made timely completion of the EA difficult.
- *Defining purpose and need.* It was difficult to define the purpose and need because DOE had already decided to proceed with the proposed action. However, the NEPA process was useful in determining alternative means of carrying out the proposed action.
- *Poorly defined scope.* The scope of the proposed action was not specific or well defined.
- *Public comment resolution for overlapping documents.* The EA and the site planning document were issued to the public at the same time. Because of considerable overlap between the two documents, it was difficult at times to determine which document was the subject of a comment. The FONSI was delayed until all comments were resolved for both the EA and the plan; comments on the plan had to be addressed in concert with other agencies.

Factors that Facilitated Effective Teamwork

- *Good communications.* Good communications and electronic transfer of documents facilitated effective teamwork.
- *In-house counsel.* Use of in-house legal counsel personnel facilitated effective teamwork.
- *Delegation of approval authority.* Delegation of approval authority for the EIS facilitated effective DOE teamwork. The NEPA Office was also available to discuss unusual procedural and regulatory issues associated with the project.
- *Assistance from the NEPA Office.* Assistance from the Office of NEPA Policy and Assistance during development of the EA, particularly in bounding the impacts, was extremely helpful.
- *Inviting the contractor to panel meetings.* DOE invited the contractor to panel meetings, which helped pull the document together in a spirit of teamwork.

Factors that Inhibited Effective Teamwork

- *Perception of a decision already made.* The perception of a decision made in advance made the project team hesitant about including all reasonable alternatives or fully analyzing the alternatives.
- *Defining contractor work scope.* The integrating management contractor needed to be convinced that providing data for the EA was part of their existing scope of work.

Process

Successful Aspects of the Public Participation Process

- *Internet Publication.* Placing a copy of the EA on our website generated the most public comment. This may be the most effective way to get public input.
- *Use of local publications.* A notice of the proposal in the site's Environmental Bulletin was beneficial to public participation.
- *Combined Federal and state processes.* Public participation in the EIS was performed in concert with a much more extensive state process. This was well received, although most public participants ultimately felt there were too many meetings on this particular project.
- *Addressing scoping comments in the EA.* Scoping comments were summarized in Chapter 1 of the EA, with references to later sections so the reader could see where the comments were addressed.
- *Use of the public reading room.* Placing the draft EA in the CERCLA public reading room, and advertising this in the local newspaper, was effective.
- *Discussions with Tribes.* Careful coordination with Federal and state-recognized Tribes was important, especially since the Tribes had conflicting interests.
- *Meeting with a single stakeholder.* Meeting with a stakeholder who was both interested and concerned was useful.
- *Good use of a citizens advisory board.* The project was introduced at several citizens advisory board meetings, which provided a foundation for disseminating information.

continued on page 17

Third Quarter FY 1999 Questionnaire Results

What Worked and Didn't Work in the NEPA Process

(continued from page 16)

Unsuccessful Aspects of the Public Participation Process

- *Lack of coordination with local and state processes.* A public participation process that was independent of local and state processes for the project may have caused some confusion.

Usefulness

Agency Planning and Decision Making—What Worked

- *Facilitating public review.* The NEPA process allowed the public to review a wetland mitigation bank memorandum of agreement on the project after it had been signed by the regulatory and resource agencies.
- *Involving EPA early.* It was important to involve EPA early on and to distribute documents directly to regional offices as well as to EPA headquarters.
- *Helping resolve differences.* The NEPA process helped the state and Tribe resolve their differences regarding the proposed action, and gave the public and other agencies a chance to review the data and move forward in the face of uncertainty.
- *Providing a forum.* The EA provided a mechanism for the public to comment on the proposed land use plan and the options expressed in the EA.
- *Improving the decision.* The NEPA process was a major success story because it helped to identify better methods and technologies to meet the purpose and need. Ultimately a better decision was made; through the evolution of the project, a combination of project alternatives was determined to be the best design choice.

Enhancement/Protection of the Environment

- *Development of mitigation.* The NEPA process influenced the siting of facilities and the development of mitigation measures, which helped resolve concerns that surfaced during the Draft EIS review.
- *Increased sensitivity to impacts.* The NEPA process made the project proponents more sensitive to potential impacts on groundwater and on nearby research projects, leading to a more environment-friendly project design.

- *Minimizing impacts.* NEPA was instrumental in facilitating informed and sound decision making and in minimizing potential project impacts. As a result of the NEPA process, adjustments were made to the project that conserved natural resources and protected the environment.
- *Demonstrating benefits of a project.* The NEPA process demonstrated that a beneficial waste treatment project could be accomplished at a very low risk.
- *Implementing potentially unpopular decisions.* The NEPA analysis provided the information necessary to make a decision and allowed DOE to implement some decisions that are not popular in all arenas.
- *Informing the public.* The NEPA process helped make both DOE management and the public more aware of the wetlands issues involving the proposed action.


Cost

Factors that Facilitated Cost Savings

- *Use of existing resources.* Using a writer-editor knowledgeable about project issues and using the expertise of cooperating agencies saved the major costs of having the EA prepared totally by a contractor.

Effectiveness of the NEPA Process

For the purposes of this section, “effective” means that the NEPA process was rated 3, 4, or 5 on a scale from 0 to 5, with 0 meaning “not effective at all” and 5 meaning “highly effective” with respect to its influence on decision making.

- For this quarter, in which two EISs and 11 EAs were completed, a total of 15 questionnaire responses were received; 12 of the 15 respondents rated the NEPA process as “effective.”
- One respondent (who rated the process as “5”) stated that the environmental impact analysis showed a very low risk to the environment, workers, and the public.
- Two respondents who rated the process as “not effective at all” (for the same document) believed that the decision was made well before the start of the NEPA process. 

NEPA Document Cost and Completion Time Facts

Cost Data

EISs

- Two EISs were completed this quarter; one cost DOE \$2.1 million and the other was paid for by an applicant and, therefore, cost information does not apply to DOE.
- Cumulatively, for the 12 months that ended June 30, 1999, the median DOE cost to prepare eight EISs was \$3.2 million; the average cost was \$5.8 million. Two other EISs were paid for by applicants.

EAs

- For this quarter, the median cost of nine EAs was \$52,000; the average was \$56,000. One other EA was paid for by an applicant.
- Cumulatively, for the 12 months that ended June 30, 1999, the median cost for the preparation of 24 EAs was \$41,000; the average cost was \$66,000. Two other EAs were paid for by applicants.

Completion Time Data

EISs

- For this quarter, the completion times of two EISs were 14 and 21 months.
- Cumulatively, for the 12 months that ended June 30, 1999, the median completion time for the preparation of ten EISs was 21 months; the average was 24 months.

EAs

- For this quarter, the median completion time of ten EAs was 11 months; the average was 17 months.
- Cumulatively, for the 12 months that ended June 30, 1999, the median cost for the preparation of 26 EAs was nine months; the average was 14 months.

Training Opportunities

How to Manage the NEPA Process and Write Effective NEPA Documents

Jacksonville, FL: September 14-18, 1999
Salt Lake City, UT: December 7-12, 1999
Fee: \$995

Reviewing NEPA Documents

Phoenix, AZ: September 7-9, 1999
Jacksonville, FL: October 26-28, 1999
San Antonio, TX: November 2-4, 1999
Fee: \$795

The Shipley Group
Phone: 888-270-2157 or 801-298-7800
E-mail: shipley@shipleygroup.com
Internet: www.shipleygroup.com

An Overview of Environmental Laws and Regulations for Managers

Germantown, MD: October 4, 1999
Fee: \$220

Environmental Laws and Regulations

Germantown, MD: October 5-7, 1999
Fee: \$850

U.S. Department of Energy
National Environmental Training Office
(NETO)
Phone: 803-725-7153
E-mail: neto@srs.gov
Internet: www.em.doe.gov/neto

Implementation of the National Environmental Policy Act on Federal Lands and Facilities

Durham, NC: November 1-5, 1999
Fee: \$960

Socioeconomic Impact Analysis Under the National Environmental Policy Act

Durham, NC: November 17-19, 1999
Fee: \$595

Duke University, Center for Environmental Education

Phone: 919-613-8082
E-mail: [Bonnie Britt at britt@duke.edu](mailto:Bonnie.Britt@duke.edu)
Internet: www.env.duke.edu/cee.html

The NEPA Toolbox: EAs with Focus

Denver, CO: December 7-8, 1999
Fee: Regular \$750; early \$695

The NEPA Toolbox: Assessing Cumulative Impacts

Denver, CO: December 9-10, 1999
Fee: Regular \$750; early \$695

Environmental Training and Consulting International, Inc.

Phone: 720-859-0380
Fax: 720-859-0381
E-mail: info@envirotrain.com
Internet: www.envirotrain.com

Cost and Time Information

“Time is Money” (Or is It?)

By: Eric Cohen, Office of NEPA Policy and Assistance

The Office of NEPA Policy and Assistance has been studying the preparation process for EAs and EISs to better understand how management practices and other factors may favorably and unfavorably affect NEPA document cost and completion time. This report examines a widely-held belief that, for NEPA documents, “time is money” – that is, that documents that take a long time to prepare generally cost a lot, and reducing preparation times would reduce costs. This study, however, found essentially no correlation between document cost and preparation time.

This report focuses on NEPA document preparation costs and does not consider the potentially substantial project cost increases from delays in completing NEPA documents. Timely document preparation is important to avoid such increases, and to make NEPA documents more useful to decision makers and the public.

The major finding of this report does not suggest that reducing preparation time is unimportant. Rather, this report suggests that NEPA Document Managers trying to reduce document costs should focus on factors other than preparation time, as we will discuss below. However, it is useful first to examine the 56 EISs and 177 EAs completed between August 1992 and June 1999 for which we have cost and time data. (See Figures 1 and 2.)

Statistical tests confirm what appears obvious by visual inspection of Figures 1 and 2: there is essentially no linear correlation between document cost and preparation time. As discussed below, sorting and slicing the data do not change this result.

Examining the 21 programmatic and site-wide and 35 project-specific EISs separately shows no significant correlation between cost and time for either type of document.

continued on page 20

Figure 1. EIS Costs versus Completion Times

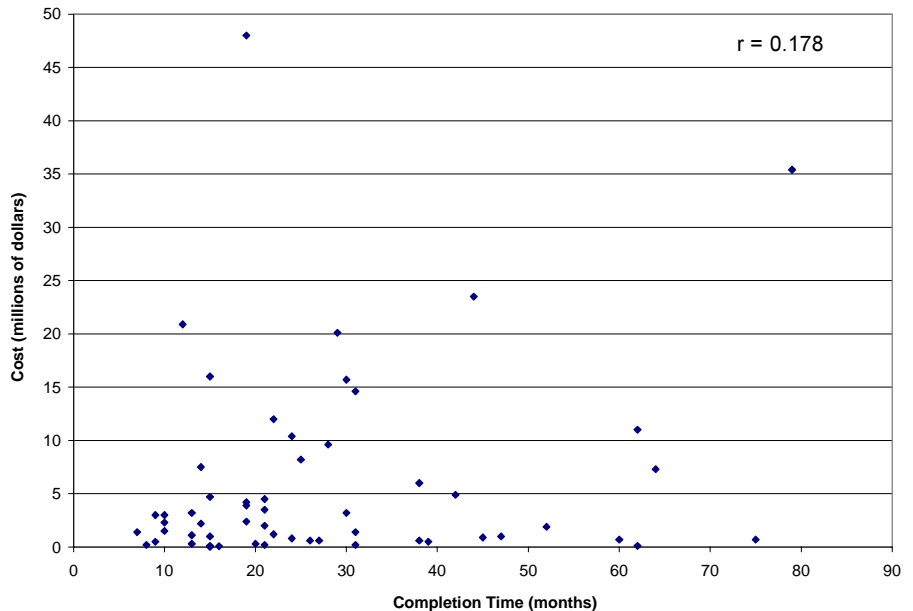
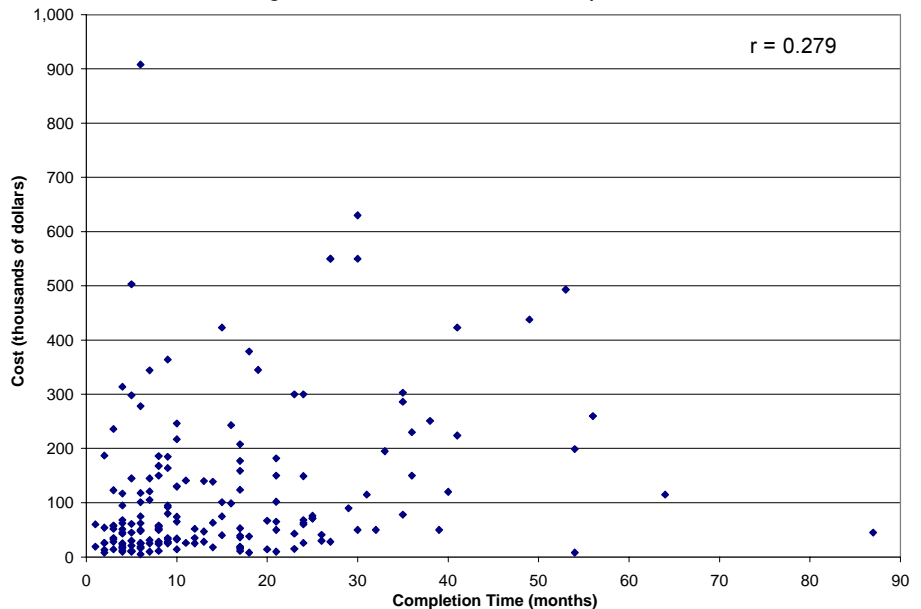


Figure 2. EA Costs versus Completion Times



Note: “ r ” is the correlation coefficient. $r = 0$ indicates no relationship and $r = 1$ represents a perfect positive correlation.

Cost and Time Information

(continued from page 19)

Eliminating “outliers” also does not change the result. For example, most of the EISs with the longest completion times are among the least costly. These include several power market administration EISs (project-specific and programmatic documents prepared in substantial part with in-house resources), an electrical transmission line EIS prepared by the Office of Fossil Energy, and an EIS on a cleanup action at Fernald prepared by the Office of Environmental Management. However, eliminating these EISs from the data (e.g., on the theory that they skew the data and do not represent the rest of the DOE complex) does not change the lack of correlation between document cost and time.

Eliminating “outliers” in another way illustrates how robust is the lack of correlation between cost and time. Data in Figures 1 and 2 are not uniformly distributed – most of the data points are clustered in the lower left corner (more obviously for EAs). This indicates a tendency toward shorter completion times and lower cost. However, numerical analysis shows that the data clustered in the lower left corners of Figures 1 and 2 show no correlation between cost and completion times, regardless of where boundaries defining “lower left” are assumed.

With one exception, EIS data for each program office demonstrate the same lack of correlation. A statistically significant but weak positive correlation between cost and time was observed for Bonneville Power Administration (BPA) EISs. This result should be interpreted cautiously in view of the weakness of the correlation and the relatively small range of costs in the data set (14 of the 15 BPA EISs cost less than \$1 million), and does not necessarily imply a causal relationship between cost and time.

Implications for Reducing Document Costs

NEPA Document Managers should focus on factors other than preparation time to reduce costs. We have had a few reports that delays in issuing a NEPA document have increased costs associated with retaining a document preparation contractor, so it would not be prudent to ignore the potential effect of completion time on preparation costs. (This study did not examine the effect of NEPA preparation contract type; however, most contracts were cost plus fee arrangements.) Nevertheless, the data suggest that efforts to reduce document preparation times, by themselves, may not be effective in reducing preparation costs. Indeed, in some cases such efforts could be counterproductive. For example, the need to complete the Spent Nuclear Fuel Programmatic EIS quickly, as required by a court order, contributed to the unusually high cost of that document (notwithstanding that its timely completion was vital to the Department and may have saved millions in overall program costs).

What other practices or factors are likely to be important to preparation costs? The December 1996 issue of *Lessons Learned*, page 13, reported on common factors associated with NEPA documents that had unusually high and low costs and completion times. Based on that report and subsequent experience, following are a few recommendations (primarily for EISs) to reduce costs:

- Use existing environmental information (e.g., affected environment, accident analyses)
- Use in-house resources to prepare portions of the document
- Manage the public participation process efficiently for proposals that may affect multiple DOE sites or require several public meetings
- Use an efficient approach to preparing responses to public comments, especially when there are many of them (see the September 1996 issue of *Lessons Learned*, page 4, for some suggestions). **LL**

Recent EIS Milestones (July 1 to September 1, 1999)

Amended Notice of Intent

DOE/EIS-0236-S
Supplemental EIS for the National Ignition Facility Portion of the Programmatic EIS for Stockpile Stewardship and Management
8/05/99 (64 FR 42684)

Draft EISs

DOE/EIS-0250
Geologic Repository for the Disposal of Spent Nuclear Fuel and High-level Radioactive Waste at Yucca Mountain, Nye County, Nevada
July 1999 (64 FR 44217; 8/13/99)

DOE/EIS-0285
Bonneville Power Administration Transmission System Vegetation Management Program
July 1999 (64 FR 45542; 8/20/99)

DOE/EIS-0289
Jacksonville Electric Authority (JEA) Circulating Fluidized Bed Combustor Project, Jacksonville, Florida
July 1999 (64 FR 46911; 8/27/99)

DOE/EIS-0306
Treatment and Management of Sodium-Bonded Spent Nuclear Fuel, Idaho National Engineering and Environmental Laboratory, Idaho
July 1999 (64 FR 41420; 7/30/99)

Records of Decision

DOE/EIS-0269
Programmatic for the Long-term Management and Use of Depleted Uranium Hexafluoride Resources at Several Geographic Locations
8/10/99 (64 FR 43358)

DOE/EIS-0200
Waste Management Program: Storage of High-level Radioactive Waste
8/26/99 (64 FR 46661)

DOE/EIS-0277
Management of Certain Plutonium Residues and Scrub Alloy Stored at the Rocky Flats Environmental Technology Site - Amended
9/1/99 (64 FR 47780)

Supplement Analyses

DOE/EIS-0169-SA-02
Natural Spawning Channels, Increased On-site Housing, and Upgrades to the Prosser Hatchery, Yakima Fisheries Project EIS
(Decision: No further NEPA review required)
August 1999

DOE/EIS-0244-SA-02
Environmental Effects of Changes in DOE's Preferred Alternative for Batch Thermal Stabilization Metals, Oxides, and Process Residues, Plutonium Finishing Plant EIS, Richland, Washington
(Decision: No further NEPA review required)
August 1999

DOE/EIS-0265-SA-15
Teanaway River Instream Flow Restoration Project, Watershed Management Program in Oregon, Idaho, Washington and Montana EIS
(Decision: No further NEPA review required)
August 1999

DOE/EIS-0265-SA-17
Union County Small Acreage Aerator, Watershed Management Program in Oregon, Idaho, Washington and Montana EIS
(Decision: No further NEPA review required)
August 1999

DOE/EIS-0265-SA-18
Ladd Creek Alternatives Watering System, Watershed Management Program in Oregon, Idaho, Washington and Montana EIS
(Decision: No further NEPA review required)
August 1999

DOE/EIS-0265-SA-19
Yarrington Road Improvement Project and Grande Ronde River/Moses Creek Lane – Slide Improvement
(Decision: No further NEPA review required)
August 1999

NEPA LESSONS LEARNED *Cumulative Index*

KEY

Primary Topic
Month Year/page number(s)
secondary topic
Month Year/page number(s)

A

Accident Analyses

Sep 95/12; Dec 95/15;
Sep 97/7; Sep 98/7

Administrative Record

see also: Legal Issues
Mar 97/13; Sep 97/7;
Jun 98/7; Dec 98/4

Affected Environment

Sep 95/12

Alternative Dispute Resolution

Jun 96/7; Jun 98/9

Alternatives

elimination of unreasonable

Mar 96/4, 5

no action

Mar 96/6; Dec 97/16

reasonable

Dec 96/6; Jun 98/13

Annual NEPA Planning Summaries

Jun 97/9; Dec 97/14; Mar 98/9;
Dec 98/14

B

Beneficial Landscaping Practices

Dec 97/11

Bounding Analyses

Mar 96/5; Jun 96/3

C

Categorical Exclusions, application of

see also: Legal Issues
Mar 97/11; Jun 97/8; Sep 97/9; Jun 98/4

Classified material, working with

Jun 96/8; Mar 98/4

Clean Air Act

Mar 98/8; Jun 98/10

Clean Water Act

Dec 98/13; Mar 99/4

Comments

see also: CEQ, Cumulative Effects Handbook; Public Involvement

on draft EIS

Mar 99/7

on final EIS

Sep 95/12

resolving other agency comments

Sep 96/6

responding to comments

Sep 96/4; Sep 97/12

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Sep 97/1; Dec 97/5; Sep 98/11; Sep 99/11

Congressional Hearings on NEPA

Dec 96/5; Jun 98/12

Connected Actions

see: Legal Issues; Litigation, Other Agency

Contracting, NEPA

DOE-wide NEPA document preparation contract procurement, awards, and tasks

Dec 96/3; Jun 97/1; Sep 97/10;
Dec 97/13; Mar 98/5; Jun 98/6;
Sep 98/7; Dec 98/4; Mar 99/9;
Jun 99/11; Sep 99/10

restructuring of

Mar 98/5

fixed price contract, use in

Mar 96/3

general support contractor, use of

Mar 96/2

performance evaluation of contractors

Mar 96/7; Jun 96/5

performance-based statements of work

Dec 98/15

reform of contracting reform initiative

Dec 96/3; Jun 96/1, 5

Core Technical Group (DOE tech. support)

Mar 98/7

Council on Environmental Quality (CEQ)

Cumulative Effects Handbook

and related activities

Dec 96/3; Mar 97/3; Jun 98/11

Environmental Justice, guidance on

Jun 97/4

Global Climate Change, draft guidance on

Dec 97/12

NEPA Effectiveness Study

Dec 96/5; Mar 97/1; Jun 97/3

NEPA Reinvention Project

Jun 97/3; Sep 97/8

Non-federal Cooperating Agencies

Sep 99/5

Cultural Resources

see also: Legal Issues; National Historic

Preservation Act

Sep 97/1; Dec 97/2

Cumulative Effects

see: CEQ; EPA; Impact Analysis; Legal Issues

D

Distribution of NEPA Documents

Jun 95/6; Dec 95/16; Mar 96/4;

Sep 96/11; Mar 97/5; Jun 99/10

DOE NEPA Compliance Guide

Dec 98/1

DOE NEPA Order 451.1/451.1A

Jun 96/5; Mar 97/13; Jun 97/4;

Dec 97/14

DOE NEPA Rule (10 CFR 1021)

see also: CEQ, NEPA Reinvention Project

Mar 96/7; Jun 96/9; Sep 96/11;

Dec 96/6; Mar 97/12; Dec 97/17

DOE NEPA Tools

DOE NEPA document archives

Sep 96/11

book reviews

Communicating Risk in a

Changing World

Sep 98/5

Environmental Policy and NEPA

Sep 98/5

Environmental Impact Assessment

Sep 96/12

NEPA Effectiveness—Managing the Process

Sep 98/5

NEPA: An Agenda for the Future

Jun 99/10

NEPA Planning Process—A

Comprehensive Guide

Jun 99/10

Toward Environmental Justice

Jun 99/11

Compliance Guide, DOE NEPA

Sep 98/3; Dec 98/1

EIS Checklist

Dec 97/14

geographical information system

Dec 96/7

glossary, NEPA

Sep 98/3

public involvement, guidance on

Dec 95/15

“Recommendations for the Preparation of

EAs and EISs”

Dec 94/4; Sep 95/12; Mar 96/6;

Dec 98/9; Mar 99/6

Stakeholders Directory

Dec 95/16; Mar 98/4; Sep 98/2

DOE NEPA Web

Jun 95/7; Mar 97/10; Jun 97/10;

Mar 98/7; Sep 98/6; Jun 99/13; Sep 99/6, 7

E

Ecological Society of America

Jun 98/10

Electronic Publishing

see: NEPA Document Preparation and Production

Endangered Species Act

Dec 95/14; Dec 97/1; Mar 98/13;

Jun 98/7; Jun 99/1

Environmental Assessments

see also: NEPA Document Preparation and Production; Public Involvement

adoption of

Sep 95/12; Jun 98/8

Electrometallurgical Process

Demonstration at Argonne National

Laboratory—West

Jun 96/8

Fernald Disposition of Prehistoric Remains

Sep 97/1

INEEL Test Area North Pool

Jun 98/8

Lead Test Assembly Irradiation and

Analysis (Hanford)

Mar 98/4

no action alternative in

Mar 96/6

public involvement for

Dec 95/15; Mar 96/7;

Mar 97/4; Dec 97/9

Quality Study, results of

Dec 96/7; Mar 97/8

Strategic Petroleum Reserve pipeline

Mar 99/4

NEPA LESSONS LEARNED *Cumulative Index*

Transuranic Management by Pyro-processing—Separation (TRUMP-S)
Mar 97/11

Environmental Critique and Synopsis
Dec 98/10

Environmental Impact Statements
see also: Litigation, DOE NEPA; NEPA Document Preparation and Production; Public Involvement

Accelerator Production of Tritium
Jun 99/4

adoption of
Jun 98/8

Agricultural Research Service (EIS for a wind energy system)
Mar 98/6

Arizona-Sonora Interconnection Proj.
Sep 99/1

Bonneville Power Administration Programmatic EISs
Dec 97/4; Dec 97/16

Commercial Light Water Reactor Production of Tritium
Jun 99/4

Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility
Dec 95/12; Jun 96/8; Jun 99/1

F-Canyon Plutonium Solution
Mar 95/6; Jun 96/8

Foreign Research Reactor Spent Nuclear Fuel
Jun 95/8; Sep 96/8; Mar 97/11

Hanford K-Basins Spent Nuclear Fuel
Jun 96/5

Hanford Remedial Action and Comprehensive Land Use Plan
Dec 96/7

Hanford Tank Wastes, Safe Interim Storage
Mar 96/1

INEEL High-level Waste
Dec 97/3

National Ignition Facility
Dec 98/13

National Spallation Neutron Source
Sep 97/9

Naval Petroleum Reserve No. 1
Dec 97/1; Mar 98/13

Pantex Site-wide
Sep 96/7

Sandia National Laboratory—New Mexico Site-wide
Jun 96/7; Sep 96/8;

Sep 97/2; Dec 98/7

Shutdown of the Savannah River Water System
Dec 97/5

Spent Nuclear Fuel Management and INEEL Environmental Restoration and Waste Management Programs
Jun 95/8; Sep 95/10;

Jun 98/8; Jun 98/13

Stockpile Stewardship and Management Programmatic
Jun 96/8; Mar 97/5; Jun 97/5;

Sep 97/3; Dec 98/13

Storage and Disposition of Fissile Materials Programmatic
Jun 96/6

Tritium Extraction Facility
Jun 99/4

Tritium Supply and Recycling PEIS
Jun 99/1

Uranium Mill Tailings Remedial Action (UMTRA) Ground Water PEIS
Dec 98/8

Waste Management Programmatic
Sep 96/6; Jun 97/5

Waste Management at the Savannah River Site
Jun 95/8

Waste Isolation Pilot Plant (WIPP) Disposal Phase Supplemental EIS II (SEIS II)
Jun 97/6; Dec 97/6; Mar 98/5

WIPP Supplemental (SEIS)
Dec 95/11

Yucca Mountain Geologic Repository
Mar 98/1

Environmental Justice

see also: CEQ
Jun 95/8; Dec 96/4; Jun 97/4;
Dec 97/4; Sep 98/3

Environmental Protection Agency (EPA)
commendation from

Sep 96/7

cumulative impact guidance
Jun 98/11; Sep 99/5

improving comment resolution with
Sep 96/6

policy for voluntary EISs
Mar 98/8; Dec 98/11

rating system, EIS
Sep 96/6; Mar 97/6

Environmental Stewardship

Dec 95/14

Executive Committee, EIS

Jun 96/2; Mar 98/2

Executive Orders/Presidential Memoranda

beneficial landscaping practices

Dec 97/11

environmental justice

Jun 95/8

invasive species

Mar 99/11

plain language

Sep 98/12; Jun 99/8

protection of children from health risks

Jun 97/9

F

Federal Environmental Quality Awards

Sep 96/10

Federal Register, publishing in

Jun 95/6; Sep 96/9; Mar 97/18;

Jun 97/7; Mar 99/7; Jun 99/8

Findings of No Significant Impact

Sep 95/12

Mitigated FONSI

Mar 99/5

Freedom of Information Act

Mar 99/11

G

Global Climate Change, CEQ draft guidance on
Dec 97/12

Glossaries, EIS

Jun 99/10

Guidance, DOE NEPA

see: Mini-guidance; DOE NEPA Tools; and specific topics

H

Habitat Conservation and Restoration

beneficial landscaping practices

Dec 97/11

LANL Habitat Management Plan

Jun 99/1

restoration of wetlands

Mar 99/5

transfer of mitigation requirements in property transfer

Dec 97/1

I

Impact Analysis

see also: Accident Analyses; Bounding Analyses; CEQ Cumulative Effects Handbook; Mini-guidance; NEPA Document Preparation and Production

assessing worker impacts

Sep 95/12

bounding analyses

Mar 96/5; Jun 96/3

methodology

Sep 96/9

models and codes, summary of

Sep 96/19

regulatory compliance, relationship to

Dec 98/9

timeframe for assessment

Mar 96/6

waste, anticipating unknown

Mar 98/8

Index, EIS

Mar 99/6

International Association for Impact Assessment (IAIA)

Jun 97/10; Sep 97/11

ISO 14000

Dec 97/7

L

Legal Issues

administrative record

Dec 98/13; Sep 99/11

alternatives

no action

Mar 96/6; Dec 97/16;

Mar 98/13

reasonable

Dec 96/6; Mar 97/12; Jun 97/5;

Sep 97/19; Mar 98/13, 14;

Jun 98/13; Sep 99/12

beneficial impacts

Sep 96/9

biodiversity

Sep 96/9

categorical exclusions, application of

Mar 97/11; Jun 97/8;

Sep 97/9, 13; Jun 98/4; Sep 99/11

CERCLA, NEPA documentation and

Sep 98/11

classified material

Jun 96/8

NEPA LESSONS LEARNED *Cumulative Index*

closure, proposed site
Jun 97/8

connected actions
Mar 96/6; Sep 96/8

contractor conflict of interest
Dec 98/13

cultural resources
Mar 98/13

cumulative impacts
Jun 96/7; Sep 96/9; Dec 97/16

“hard look”
Sep 99/12

methodology
Sep 96/9

mitigation
Dec 97/18; Mar 98/14; Jun 98/18;
Sep 99/12

NEPA review required/not required
Sep 96/9; Jun 97/8

preparation of site-wide NEPA
document
Jun 96/7; Sep 96/8

purpose and need
Sep 97/19; Jun 98/13

regulatory compliance, relationship to
Dec 98/9

responding to comments
Jun 96/8; Sep 96/9

segmentation
Mar 98/14; Jun 98/13

security issues
Dec 97/17; Jun 98/13

“significance”
Dec 98/9; Sep 99/12

supplemental EIS, need for
Mar 97/12; Jun 98/13

tiering
Dec 97/16; Jun 98/13

transboundary env. impacts
Dec 97/14

transfer of property
Sep 96/9; Dec 97/1

waste
off-site disposal of
Jun 97/8
shipment (international) of
Mar 98/14

Lessons Learned Process Improvement Team

Mar 99/3

Litigation, DOE NEPA

Bonneville Power
Administration Business Plan
Dec 97/16

Dual Axis Radiographic
Hydrodynamic Test (DARHT) Facility
Jun 96/8

Electrometallurgical Process
Demonstration at Argonne
National Laboratory—West
Jun 96/8; Sep 96/8

Experimental Breeder Reactor-II,
Argonne-West
Sep 98/12; Mar 99/10

F- and H- Canyon facilities,
Savannah River Site
Mar 95/6; Jun 96/8

Foreign Research Reactor

Spent Nuclear Fuel
Sep 96/8; Mar 97/11; Dec 97/17;
Jun 98/13

K-25 decontamination and
decommissioning
Dec 97/17; Sep 98/11; Sep 99/11

National Ignition Facility
Dec 98/13

Naval Petroleum Reserve
Number 1 (NPR-1)
Mar 98/13

Nevada Test Site Site-wide
Jun 97/8

Sandia National Laboratory
Jun 96/7; Sep 96/8

Spent Nuclear Fuel Management and
INEEL Environmental Restoration
and Waste Management Programs PEIS
Jun 98/13

Stockpile Stewardship and Management
PEIS
Jun 97/5; Sep 97/3; Dec 97/17;
Mar 98/13; Jun 98/14; Sep 98/10;
Dec 98/13; Mar 99/10

Transuranic Management by Pyro-
processing—Separation (TRUMP-S)
Mar 97/11

Vortec Corporation Vitrification
Demonstration, Paducah Gaseous
Diffusion Plant (PGDP)
Jun 97/8; Sep 97/13

Waste Management PEIS
Jun 97/5; Mar 98/13; Sep 98/10;
Mar 99/10

Waste Isolation Pilot Plant (WIPP)
Jun 97/6; Sep 98/11; Jun 99/12

Litigation, Other Agency NEPA

Army Corps of Engineers
Sep 96/8, 9; Sep 97/19; Dec 98/13

Coast Guard
Jun 97/8

Department of Transportation
Dec 98/13; Sep 99/12

Department of the Interior
Sep 99/11, 12

Farmers Home Administration
Sep 96/9

Federal Aviation Administration
Dec 96/6

Federal Highway Administration
Dec 96/6; Jun 97/17; Sep 99/12

Forest Service
Sep 96/9; Mar 97/12;
Dec 97/18; Jun 98/14

General Services Administration
Mar 98/14

Housing and Urban Development
Dec 97/18

National Park Service
Sep 99/12

Postal Service
Mar 98/14

M

Mini-guidance (DOE NEPA Office)

appendix versus incorporation by
reference
Jun 96/4

bounding analyses
Jun 96/3

draft material, use of
Jun 96/4

EIS distribution
Mar 96/4

EIS glossaries
Jun 99/10

EIS index
Mar 99/6

EIS summary
Mar 96/3

Environmental Critique and Synopsis
Dec 98/10

eliminating alternatives
Mar 96/4

extending public comment periods
Mar 99/7

impact assessment timeframe
Mar 96/6

incomplete, unavailable information
Mar 99/6

no action alternative in EAs
Mar 96/6

off-site vendor impacts
Mar 96/6

plain language for Fed. Reg. notices
Jun 99/8

procurement and NEPA
Mar 96/5

record of decision distribution
Jun 99/10

regulatory compliance, relationship to
Dec 98/9

reference materials, availability of
Jun 96/4

responding to comments
Sep 96/4

Supplement Analysis
Dec 98/10

visual excellence
Sep 96/3

Mitigation
compensatory wetlands mitigation
plan
Mar 99/5
transfer of mitigation requirements
Dec 97/1

N

National Academy of Public Administration

Jun 98/10; Sep 98/1, 4

National Association of Environmental Professionals (NAEP)

Sep 96/10; Dec 97/8, 9;
Mar 98/9; Sep 98/9; Sep 99/8

National Environmental Training Office

Dec 97/10; Mar 98/12;
Jun 98/5; Dec 98/12

National Historic Preservation Act

Sep 97/4; Jun 98/7; Dec 98/11;
Jun 99/3; Sep 99/12

NEPA Bookshelf

see: *DOE NEPA tools, book reviews*

NEPA Compliance Officers (NCOs)

NCO meetings
Dec 96/1; Sep 97/6; Jun 98/1;
Sep 98/1, 3; Dec 98/3

NEPA LESSONS LEARNED Cumulative Index

NCO role
 Sep 96/1; Dec 96/1;
 Mar 98/10; Jun 98/3

NEPA Document Managers
 Jun 96/5; Sep 96/5; Jun 98/3; Dec 98/3

NEPA Document Preparation and Production
see also: Impact Analysis; Mini-guidance; Trend Analyses, DOE NEPA Documents

color printing
 Sep 97/6

draft material, use of
 Jun 96/4

electronic publication
 Jun 97/10; Sep. 98/6;
 Jun 99/13; Sep 99/6, 7, 8

glossaries, EIS
 Jun 99/10

incomplete, unavailable information
 Mar 99/6

index, EIS
 Mar 99/6

information documents/pre-EIS data collection
 Sep 97/5; Dec 98/7

models and codes, summary of
 Sep 96/19

photosimulation
 Sep 97/14

"Pragmatic" EIS (BPA model)
 Dec 97/4

readability of NEPA documents
 Mar 97/9; Sep 97/14

visual elements
 Sep 96/3

NEPA, Integration with Other Reviews
see: CAA; CWA; CERCLA; NHPA

NEPA Process
see also: Public Involvement

decision making, effect on
 Mar 96/1; Sep 99/9

early application
 Mar 98/6

effectiveness
 Dec 98/19

improving the EA process/EA Quality Study
 Dec 96/7; Mar 97/8

innovative document review practices
 Dec 97/6

Internet, use of
 Sep 99/8

management, planning and coordination
 Sep 95/10; Mar 96/1;
 Jun 96/2; Dec 97/9; Mar 98/1

scoping
 Sep 96/3; Sep 97/2;
 Dec 97/3, 9; Mar 98/6; Sep 99/1

streamlining
 Sep 96/11; Mar 97/1; Jun 97/3

NEPA Teamwork
 Sep 96/1; Dec 96/1; Mar 98/11

Nuclear Regulatory Commission (NRC)
 Jun 98/8

P

Plain Language
 Sep 98/12; Jun 99/8

Pollution Prevention

DOE model commended by EPA
 Sep 96/7
beneficial landscaping practices
 Dec 97/11

Privatization

see also: Procurement
 Sep 97/8

Procurement

applicability of
 Mar 96/5; Sep 97/8
request for proposals
 Mar 96/5; Dec 96/3

Property Transfer/Divestiture

see also: Legal Issues, transfer of property
 Dec 97/1; Dec 98/6

Public Involvement

see also: Comments; NEPA Process, scoping approaches

Mar 96/1; Mar 97/4; Jun 97/6;
 Sep 97/2, 12; Dec 97/3, 15;
 Mar 98/4

coordination among DOE offices
 Sep 95/10; Mar 97/5

early public notice

Mar 96/7; Mar 97/4; Jun 97/7
extending public comment periods
 Mar 99/7

public scoping, approaches to
 Sep 97/2; Dec 97/3; Sep 99/1

public hearings, approaches to
 Dec 95/11; Jun 96/6; Jun 97/6

reference materials, availability of
 Jun 96/4

responding to comments
 Sep 95/12; Sep 97/12

Secretarial policy on public involvement in EA process
 Dec 95/15

Stakeholders Directory
 Jun 97/7; Mar 98/4

toll free numbers, use of
 Jun 96/6; Sep 97/2

video conferencing
 Jun 96/6

Waste Isolation Pilot Plant Supplemental EIS(s)
 Dec 95/11; Jun 97/6

working groups, workshops
 Mar 97/4; Dec 97/3

R

Records of Decision

addressing public comments on final EIS in
 Sep 95/12
management of TRU waste, RODs for
 Mar 98/5

Related NEPA Documents

need for coordination/consistency
 Sep 95/12, 13; Dec 95/15

S

Safety Analysis Reports

Dec 95/15

Scoping

see: NEPA Process

Society for Effective Lessons Learned Sharing

(SELLS)

Mar 99/3

Stakeholders

(see also: DOE NEPA Tools)

Dec 98/8; Mar 99/7; Jun 99/2

Summary, EIS

Mar 96/3

Supplemental EIS/Supplement Analyses

see also: Legal Issues

Mar 97/13; Mar 98/13; Dec 98/10

T

Tiering/Tiered NEPA Documents

Jun 99/1

Training and Certification

CD-ROM NEPA training
 Jun 98/5

Certified Environmental Professional (NAEP)
 Dec 97/8

National Env. Training Office (NETO)

Dec 97/10; Mar 98/12;
 Jun 98/5; Dec 98/12

"NEPA Process Game" (Richland Operations Office)
 Mar 98/11

U.S. Forest Service
 Sep 97/12

Transboundary Impacts Assessment

Dec 97/14; Sep 99/4

Trend Analyses, DOE NEPA Documents

completion time
 Jun 96/16; Dec 96/15; Jun 97/16;
 Dec 97/22; Mar 98/17; Dec 98/20

cost
 Mar 96/15; Jun 96/17; Dec 96/15;
 Jun 97/19; Dec 97/22; Mar 98/17;
 Dec 98/20; Sep 99/19

cost and time outliers
 Dec 96/13; Sep 99/20

effectiveness
 Jun 96/13; Sep 96/16; Dec 96/10;
 Sep 97/17; Dec 98/19

EIS cohort tracking
 Jun 97/16; Dec 97/22; Jun 99/19

misuse of questionnaire data
 Mar 97/12

W

Waste Management, DOE NEPA documentation for

see also: Legal Issues; Litigation, DOE NEPA; EISS; Impact Analysis

analysis of impacts associated with off-site facility
 Mar 96/6

anticipating unknown waste, sample language for
 Mar 98/8; Jun 98/7

management of TRU waste
 Mar 98/5

Wetlands Mitigation and Restoration

Mar 99/5



Office of NEPA Policy and Assistance, EH-42
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0119