

October 2, 2003

MEMORANDUM TO: John R. Tappert, Chief
Environmental Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

FROM: William L. Dam, Project Manager **/RA/**
Environmental Section
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

SUBJECT: FY03 YEAR-END UPDATE REGARDING CONTRACTUAL
DEVELOPMENT OF THE GEOGRAPHICAL, ENVIRONMENTAL, AND
SITING INFORMATION SYSTEM (GEN&SIS) SOFTWARE

Progress on developing the GEN&SIS software by the Lawrence Livermore National Laboratory (LLNL) is proceeding at a rate slower than needed for supporting immediate review of early site permits. Outcomes over FY03 are outline here in order to improve project performance with recommendations provided to aid in decision making for the FY04 contractual period.

FY03 Progress Report

For one week in April 2003, Mr. Barry Zalcman and I met with LLNL staff to discuss needs and expectations for completing development of the software. Whereas the original scope of the project was to provide a nationwide geographical information system of all NRC sites, we communicated that the focus needed to shift to support review of three early site permits by the end of FY03. Several improvements to the software were made including organizing presentation of data layers to be selected by users, reviewing the threatened and endangered species database, and improving updates to the list of active website links.

In August 2003, a workshop was presented at the Pacific Northwest National Laboratory (PNNL) as described in my September 5, 2003 memo. Significant progress was made during the workshop by demonstrating the capabilities of the software to the technical staff who will be conducting early site permit reviews. Many comments were given which fit into three general categories: enhancing software, updating website links, and improving data sources. Most of the PNNL staff recommendations involved improvements to database coverages and updating metadata information source files including to:

1. Use the 2000 Census data rather than 1990 data;
2. Label major interstates and Federal highways;
3. Include watershed, soils and eco-region coverages;
4. Add natural gas pipelines and electrical transmission lines;
5. Add NRC site plant boundaries, land ownership of facilities, and photos of facility;

6. Include topographic and aerial photographs of sites;
7. Add cultural resources and Native American information;
8. Show cities on maps that contain less than 10,000 people;
9. Add school and hospital databases; and
10. Add climate data and tornado tracking analysis program for strike probability/wind speed

As of the end of FY03, items 1 and 2 have been made to the software system. Item 1 updates were made only for the North Anna site and item 2 was made at several NRC licensed sites. The remaining eight data items are needed for the software to be sufficiently useful according to the PNNL technical reviewers. Funding accessibility and resource availability was not adequate during the last six weeks of FY03 to respond to the updates needed. With the North Anna early site permit arriving on September 25, 2003, according to Mr. Andrew Kugler we have about two additional weeks during the sufficiency review until the reviewers will be actively needing to use the GEN&SIS software. In addition, technical comments are needed prior to the December 8 site visit. Therefore, software will be in demand between about October 13, 2003, until November 26, 2003, for the North Anna review.

Recommendations for FY04

1. To meet the urgent deadline of reviewing the North Anna early site permit, I propose that we have a conference call with LLNL management and staff to discuss what items can be accomplished over the next two weeks. Items 3 through 10 above are listed in order of what I consider to be decreasing priority.
2. I am available for travel to LLNL to work with the lab staff to stay focused on our priorities.
3. I am also available for travel to PNNL to work with the technical reviews to trouble shoot use of the software by the technical reviewers and communicating directly with LLNL for making updates.
4. I propose that the FY04 contract to LLNL be more detailed to list milestones in completing tasks that measure performance for accomplishing the data and software requirements.
5. For preparing to review other early site permits such as Clinton, which also arrived on September 25, 2003, I propose we examine alternative contractor support either at other national labs and/or through commercial contracts. NRC's Office of Nuclear Materials Safety and Safeguards works with another contractor to provide Geographical Information Systems (GIS) support on decommissioning sites and Yucca Mountain. Ms. Sally Adams is checking on the ability for us to contract to outside vendors.

6. Include topographic and aerial photographs of sites;
7. Add cultural resources and Native American information;
8. Show cities on maps that contain less than 10,000 people;
9. Add school and hospital databases; and
10. Add climate data and tornado tracking analysis program for strike probability/wind speed

As of the end of FY03, items 1 and 2 have been made to the software system. Item 1 updates were made only for the North Anna site and item 2 was made at several NRC licensed sites. The remaining eight data items are needed for the software to be sufficiently useful according to the PNNL technical reviewers. Funding accessibility and resource availability was not adequate during the last six weeks of FY03 to respond to the updates needed. With the North Anna early site permit arriving on September 25, 2003, according to Mr. Andrew Kugler we have about two additional weeks during the sufficiency review until the reviewers will be actively needing to use the GEN&SIS software. In addition, technical comments are needed prior to the December 8 site visit. Therefore, software will be in demand between about October 13, 2003, until November 26, 2003, for the North Anna review.

Recommendations for FY04

1. To meet the urgent deadline of reviewing the North Anna early site permit, I propose that we have a conference call with LLNL management and staff to discuss what items can be accomplished over the next two weeks. Items 3 through 10 above are listed in order of what I consider to be decreasing priority.
2. I am available for travel to LLNL to work with the lab staff to stay focused on our priorities.
3. I am also available for travel to PNNL to work with the technical reviews to trouble shoot use of the software by the technical reviewers and communicating directly with LLNL for making updates.
4. I propose that the FY04 contract to LLNL be more detailed to list milestones in completing tasks that measure performance for accomplishing the data and software requirements.
5. For preparing to review other early site permits such as Clinton, which also arrived on September 25, 2003, I propose we examine alternative contractor support either at other national labs and/or through commercial contracts. NRC's Office of Nuclear Materials Safety and Safeguards works with MANDEX, Inc. to provide Geographical Information Systems (GIS) support on decommissioning sites and Yucca Mountain. Ms. Sally Adams is checking on the ability for us to contract to outside vendors.

Distribution: See next page

Accession no.: **ML032760086**

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML032760086.wpd

OFFICE	RLEP:DRIP:PM	RLEP:DRIP:LA
NAME	W. Dam	M. Jenkins
DATE	10/2/03	10/2/03

OFFICIAL RECORD COPY

DISTRIBUTION: FY03 YEAR-END UPDATE, DATED: October 2, 2003

RLEP R/F

B. Zalcman

S. Adams

W. Dam

T. Kenyon

A. Kugler

J. Wilson