

December 6, 1999

Alexander Marion
Director, Programs Nuclear Generation
Nuclear Energy Institute
Suite 400
1775 I Street, NW
Washington, DC 20006-3708

Dear Mr. Marion:

Attached are responses to the questions posed by the Nuclear Information Records Management Association related to NRC's ADAMS Program and its electronic information exchange (EIE) initiative. Please transmit these responses to NEI stakeholders as appropriate.

We also will have copies of the responses available as a handout of the upcoming December 10, 1999, meeting.

Sincerely,

/Original signed by/

Lynn B. Scattolini
ADAMS Program Manager
Office of the Chief Information Officer

cc: S. G. Burns
J. A. Zwolinski
J. Turdici
A. E. Levin
B. J. Shelton

Attachment: As stated
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*public per
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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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A handwritten signature in black ink, appearing to read "Lynn B. Scattolini".

Lynn B. Scattolini
ADAMS Program Manager
Office of the Chief Information Officer

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Industry EIE Questions and Concerns

Question 1

It appears that licensee participation should be voluntary since participation in the NRC EIE effort is based on economic efficiencies.

Answer:

Yes, participation by licensees and agency constituents will be on a voluntary basis.

Question 2

What will be the impact on NRC work processes, specifically with regard to review and approval of paper copy license amendments versus electronic submittals? What are the anticipated projections on NRC review times, e.g., technical specification license amendments? (It is anticipated that work processes would be more efficient with electronic submittals, thus providing more timely review of license requests and submittals.)

Answer:

The NRC anticipates that there will be impacts on work processes throughout the agency as a result of the implementation of ADAMS. For example, if the utility submits a document electronically, it will take less time for the NRC staff to receive the document than in today's paper-based environment. However, since not all modules of ADAMS have been implemented, and the NRC staff has only recently been trained in the use of the ADAMS document management and workflow software and is not yet proficient in its use, it is difficult to project what all of the changes to NRC work processes will be.

OCIO is working with NRR to develop one approach to handling "living documents" (i.e. documents that are kept up to date today by replacing segments at a time -- traditionally, by pen and ink and replacement pages) including license amendments, in the ADAMS environment. We are also working with a NIRMA Living Documents Working Group to understand the industry perspective. NRC anticipates that it will sponsor a public workshop in March 2000 to discuss this topic, with the objective of arriving at a solution that is cost-effective for both the agency and its licensees. Given this situation, it is premature to attempt to anticipate or estimate what changes to review times might result from process changes that have yet to be defined.

Question 3

Does the NRC have cost estimates for the processing and management of paper copy-based documents to compare and contrast with efficiencies gained with electronic versions of documents? Will there be a difference in NRC fees assessed to licensees who submit documents and correspondence in electronic format as compared to those who submit paper?

Answer:

By the end of the first quarter of CY 2000, we expect to have detailed cost data on the unit cost of processing a paper-based externally generated document through ADAMS – from receipt through scanning, performing optical character recognition, profiling (cataloging), and electronic distribution to NRC staff. We also will know the time (translated into costs) of each element of the process. So, we can tell industry what the cost avoidance is in receiving a document through EIE rather than in paper form. We can also compare the unit cost of performing the same steps the way we used to do business. Of course, processing incoming licensee documents is only one of many document management processes affected by and supported by ADAMS.

The fees the NRC assesses to individual applicants and licensees will not be impacted by the manner in which the documents are received (i.e. paper or electronic). Fees for services (Part 170 fees) are assessed based on the time spent in reviewing and approving the submitted documents. If the agency achieves an overall reduction in costs due to efficiencies created by EIE, this will be reflected in future budgets and fees.

Question 4

It is anticipated that in order to take full advantage of electronic document management technologies, the NRC will need to convert paper submittals to electronic form. What if any costs will NRC assess licensees for transferring paper "living documents" to electronic versions?

Answer:

As indicated in response to question 2, the NRC is still in the process of developing a strategy for the maintenance of "living documents" within the ADAMS environment. NRC recognizes that we will need the base "living document" in electronic form in order to operate in an electronic environment.

NRC's Office of General Counsel and NRC's Executive Council have agreed to the concept that the base document submitted by the utility in electronic form would become the record copy of the agency.

We plan to work with industry to develop a "win-win" approach to submitting "living documents" that will represent the least cost to both the NRC and the industry. It is our understanding that many of these documents already exist in electronic form, so it would appear to be less expensive for the licensee to voluntarily create a mutually acceptable submission on a media such as CD-ROM than for the NRC to convert its paper-based file copy to electronic form. Both NRC staff and the licensees will need to be flexible and willing to adjust their current work processes in order to implement a cost-effective approach.

Currently, we are gathering data on what it costs to master an original CD-ROM, modify the CD-ROM to reflect changes, make duplicates of CD-ROMs for distribution, and so forth. The industry also has experience, including cost data, with these and alternative processes that we are hoping you will share with us.

There is an administrative cost today associated with the processing and handling of official documents. These costs are generally considered as overhead. The impacts, increases or decreases, due to EIE on overhead are currently not known, and will not be known until we obtain the cost information described in answer 3.

Question 5

Will the Electronic Reading Room link to NRC's web site be outside the firewall? Are the documents available via this reading room considered "official records" or copies? What level of control is anticipated for base documents maintained by the licensee that may be posted by NRC in this Reading Room? Will there be disclaimers "installed" for the documents posted in the reading room absolving the utility licensees of document fidelity?

Answer:

Yes, the Electronic Reading Room will be maintained on servers that are outside the NRC's firewall.

The documents made available via the reading room will be a combination of copies of record and non-record material. The profile (data record) of the document will specify whether it is NRC's official agency record or not.

The Electronic Reading Room has two libraries: the legacy library containing the information that formerly resided in the PDR's Bibliographic Retrieval System and the PARS. The legacy library has a combination of descriptions of documents that reside on microfiche and, for a small quantity of documents, full-text. All of this information is non-record material.

The second library, PARS, has descriptions of documents, the image, and the full-text of documents. The vast majority of these documents will be record material. Once ADAMS is declared as NRC's official recordkeeping system (scheduled for January 1, 2000), newly received and generated documents will be placed in ADAMS as "official records", with those that are identified as being "publicly available" replicated (copied from the internal to external server) to PARS.

There are no plans at this time to post any documents that are maintained by the licensees in this reading room. Only those documents that are submitted to the agency and will be under our control will be included in the reading room.

There are no plans to install any disclaimers in the reading room related to the licensees.

Question 6

What levels of assurance will be applied to notarized signed documents? What is the NRC's position regarding certifications concerning document transfer and content? How will this affect the current process for docketed submittals, licensee controlled documents and NRC controlled documents? What is the potential impact on current processes involving notarized signature under "oath and affirmation," acknowledged receipt, and required distribution within NRC and other entities?

Answer:

Policies and procedures for the submittal of documents to the NRC electronically via Electronic Information Exchange (EIE) are still being developed. As part of this process we are reviewing the surety levels required for all of the documents currently submitted to the NRC to establish the requirements for handling them in electronic form. Once the policies and procedures have been proposed, a rulemaking will be initiated that will incorporate the proposal and be issued for public comment. The Digital Signature solution (a PKI system) that the NRC uses will ensure that a high level of surety is applied to all electronic transmittals. The system itself will acknowledge receipt. NRC will be responsible for distribution, as in the past. Externally generated documents will be distributed electronically using ADAMS software. If the document needs to be distributed outside the agency, it will either be distributed electronically or in paper form, depending on the recipient.

Documents that require oath or affirmation must contain a declaration in the form provided in 28 U.S.C. §1746 unless the author of the document chooses to use digital notarization in jurisdictions where such capability is available.

Question 7

What will become the "official record," who is the office of record (owner) for the "official record," and who will control it? Given that licensees and the NRC have a "record" of any particular transaction, how will such records be controlled?

Answer:

The current processes for maintaining records of transactions will remain exactly the same in the electronic environment. The only change to the processes will be that the "official record" copy of the record material required to document these transactions will be maintained electronically. If the documentation is in paper form, we will convert it to an image (Tagged Image File Format (TIFF) and place it in ADAMS as the "official record" of that transaction. We will destroy the paper document after the image is verified as being acceptable. Those documents that are available in electronic form will be converted to an image for recordkeeping purposes. The native file will be maintained and an image (Portable Document Format (PDF)) will be created and linked to the native file. This PDF image will be the "official record" of the document.

The office of record (owner) of all documents maintained in ADAMS will be the same as it was for the paper documents maintained before ADAMS. The regulatory documents prepared by licensees and transmitted to the NRC are NRC records. Licensees will continue to control changes to their documents. NRC will not alter any licensee-generated records in order to capture them in ADAMS; nor will NRC alter such records once they have been captured in ADAMS. Documents declared official records by the NRC will be under the control of the NRC's records management staff to ensure their fidelity.

Question 8

How will NRC maintain the fidelity of licensee- submitted base documents and subsequent addenda or submittals?

Answer:

The digital signature feature of the PKI system as it relates to changes that may occur during transmission of documents will assure fidelity. Fidelity as it relates to the visual representation of a document will be assured by converting the source document to PDF (as necessary) and by saving the source document in native format along with the PDF.

Question 9

Many utility licensees maintain plant technical specifications and updated safety analysis reports in different electronic media and formats. Will NRC accept copies of "controlled" base document that are maintained by licenses on CD-ROM, diskette, or license web site? Will the NRC "dictate" a particular electronic format (e.g., Portable Document Format)? If not; and if the NRC uses .PDF internally, what conversion means will be available? Who is responsible for converting the documents? If a document is converted to .PDF will NRC assure the fidelity of what was transmitted?

Answer:

As indicated in responses to questions 2 and 4, the NRC hopes to receive "controlled" base documents in electronic form from the licensees on a voluntary basis. If the stakeholder elects to submit electronically, we anticipate that very large documents will be submitted via the U.S. mail in CD-ROM, and those smaller documents, which represent the majority of the transactions, will be submitted electronically via NRC's EIE program at our web site.

As stated previously, we are still developing the policies and procedures for Electronic Information Exchange (EIE). We currently plan to accept documents in PDF, Word, and WordPerfect formats. The policies and procedures that will be proposed as part of the rulemaking mentioned previously will delineate the formats that will be acceptable for submittal to the NRC.

As for fidelity, see the answer to Question 8.

Question 10

Regarding event reporting pursuant to 10 CFR Part 50.72, can e-mails substitute for the traditional telephone call and fax to the NRC Emergency Response Center? Will these be required as a record of the action and what other supporting information will be required?

Answer:

As stated previously, it is premature to speculate on which current processes will be replaced as a result of the implementation of ADAMS. The office with the functional responsibility for this

program would need to determine if and by what means the process described would be replaced.

Question 11

Will the NRC accept a licensee's preference regarding the software used in certifying the submittal transfer is accurate and complete? Who will be responsible for the purchase, documentation, system maintenance and testing of that software?

Answer:

The NRC is deploying a PKI system using Verisign Corporation as the certificate provider and UWI as the submittal form. The NRC will provide the certificates and all associated software, except for the web browser, as downloadable files. The NRC will be responsible for all related documentation, maintenance, and any other software related activities.

Question 12

Will NRR and the regional offices transmit to utility licensees electronic versions of approved license amendments, final inspection reports, safety evaluation reports, and other NRC documents to achieve further efficiencies? Will these be provided in an electronic format (word processing and spreadsheet software) specified by the licensee?

Answer:

The infrastructure contained as part of ADAMS will support the transmittal of electronic versions of documents to our licensees. We hope that by providing this functionality we will be able to provide many of the services suggested. When the EIE program is fully operational, it is our plan for it to be a two-way process, with the stakeholder submitting electronically to the NRC, and NRC distributing its documents electronically to the stakeholder. However, it will take several years for the program to be fully implemented and to mature.

The electronic formats that NRC offices will use to transmit documents to licensees will be determined by consultation between those offices and their licensees. At this time, NRC knows that it can provide PDF, which will be the official agency record. We will analyze whether we can provide Word and WordPerfect, which are the other formats that are supported in incoming EIE submittals.