

May 9, 2003

MEMORANDUM TO: Jeff Ciocco
HLW Document Collection Project Manager

FROM: Daniel J. Graser */RA/*
Licensing Support Network Administrator

SUBJECT: NRC Technical Solution for HLW Document Collection

NRC has been implementing a technical solution to publish electronic documents on a server accessible to the Licensing Support Network (LSN) pursuant to the requirements of 10 C.F.R. Part 2, Subpart J. The solution uses Panagon™ web publishing software and custom code to extract High Level Waste (HLW) documents from the ADAMS record repository, generate an XML bibliographic header, merge the document content with that header and publish the resulting file on the HLW server. LSN staff has analyzed this solution in some detail as a result of our review of its output during recent joint testing and offers the following observations.

1. We note that it takes the affirmative action of an NMSS staff member to right-click and check off the “publish” box in order for documents to be pushed from the ADAMS repository into the publishing process. If a document is subsequently revised in ADAMS, either for bibliographic or document content changes, this process must be affirmatively repeated in order for the changes to be propagated out to the HLW collection server. This affords some sense of security that “global search and replace” maintenance activities that may be performed by OCIO records managers will not automatically propagate into the HLW collection.
2. We note that when records are merged and placed on the HLW collection server, the result is a single entry representing both the bibliographic content and the document content. If there is a change to either the document content or the bibliographic content, the single HLW document rendition is given a new date and time stamp that will subsequently be flagged by LSN audit software. As noted during our discussions, there is no simple way to determine which of these two elements - bibliographic or content - has changed when the LSN spider reviews the revised HLW document record.
3. We have identified that LSN staff could independently review the formerly published document content and/or the subsequently published content against the ADAMS document version in a manual review activity. We have also identified that software such as WINDIFF could be utilized to electronically compare the ADAMS version of the document content with the HLW collection version. Although the LSN staff would be actively involved in identifying and diagnosing document integrity problems, internal NRC quality control, correction, and remediation efforts supporting a participant’s published collection are the responsibility of NRC, as they are with any other party to the proceeding. As such, a large number of “republishing” transactions showing up as “changed” documents, in addition to placing a significant burden on LSN staff by involving them in a time consuming problem identification and problem resolution that would have to be undertaken while the “changed” documents remained available via the

LSN, could result in the document integrity of the NRC collection being called into question by another party until fully reconciled.

4. Given the potential questions that such “republishing” transactions could raise about the integrity of the NRC collection, NRC staff management may want to consider whether the current technical solution may place NRC at some risk should another party raise a challenge considering that a Pre-License Application Presiding Officer (PAPO) may subsequently direct significant remediation efforts adequate to respond to document collection integrity concerns. In particular, in this case, there appears to be a “back door” opportunity for a header being changed at the staff level by owners/records managers without either the server administrator or the certifying official being cognizant.
5. We have further identified that, although it now is populated by software and procedures that interact directly from ADAMS, the configuration of the HLW collection server does not preclude documents being placed on the server by other methods or foreclose using other procedures that would not automatically trigger the type of LSN audit scrutiny that will result from the “republishing” transactions under the present scheme. This could be addressed procedurally by NRC staff quality assurance reviews as deemed appropriate by NRC’s certifying official.

In consideration of the early availability of NRC’s HLW collection, and the opportunity to further test and observe whether the proposed solution will deliver a stable collection, we agree to the technical solution as proposed. As noted above, however, we feel that there may be risk to the agency associated with the potential for large numbers of “changed” documents being identified, i.e., flagged, by our audit software that could result in party challenges and a determination by a PAPO that the NRC collection’s integrity is questionable. Consequently, we would like to continue working with NRC staff to identify whether any additional software or procedural steps that could be taken to ensure that large numbers of “flagged” documents are not made available via the LSN until the integrity of the HLW collection version against the underlying ADAMS version is investigated and resolved.

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