



Department of Energy

Washington, DC 20585

SEP 21 1989

Mr. Francis X. Cameron
Office of the LSS Administrator
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Re: Your Letter of August 7, 1989
Comments on Prototype System Cataloging Manual

Dear Chip:

I have reviewed the above noted letter and its enclosure in some detail, and have forwarded them to SAIC for their consideration. I will be happy to review the next version of NUDOCS header design, and I agree that we should cooperate on the coordination of header design efforts. However, I feel that a better defined effort than merely exchanging preliminary study documents, internal system design/redesign, etc., is needed. We need to move toward a definition of LSS header record content. A focused work group should begin work on the development of header record designs so that all potential parties have a more definitive statement of the formats they should be moving toward. This initiative should commence sooner rather than later.

Regarding the comments you have forwarded, I would like to address what seems to be a persistent tendency within NRC to assume that the processing protocols, headers, and other record fields utilized in the instrumented test bed processing may pre-determine the eventual LSS header design. Likewise, there seems to be a tendency to perceive our test bed environment as having more objectives than, in fact, it does. Your letter implies that the headers used for the instrumented test bed reflect, or will reflect, the failure in LSS "to ensure the completeness and the unique identification of this critical set of documents" by our treatment of the Document Type and Detailed Document Type fields for the instrumented test bed. Let me assure you that the instrumented test bed header treatments are not pre-determinative of the LSS header formats.

The information management questions being addressed by the instrumented test bed can be summarized by the following:

- How will the system be used?
- What aids or hindrances are evidenced in our overall concept designs?
- What are the effects of partitioning text?

- How will header fields be utilized in conjunction with text search capabilities?
- How will descriptors be used in full text search?
- How effective are printed aids such as a thesaurus and a retrieval manual?

The instrumented test bed, by intent, does not have the validation or testing of the specific level of document type treatment as an objective, although such by-products will be duly considered.

I would also like to make a general observation which is meant to be a constructive one. Your letter notes that NRC's upgrade of NUDOCS makes the continuing dialogue on the issues related to header design particularly important, and that you would like to ensure consistency between the LSS and NUDOCS headers. I read this, in conjunction with the detailed comparisons with 'the way things are done in NUDOCS' that are found throughout the 11 pages of comments you have provided, and am left with the impression that NRC perceives the LSS to be simply a restatement of NUDOCS in a new hardware and software environment. For example, take the question from the comments: Should the LSS detailed document types "be mapped to NRC document type codes"? Why not ask, rather, "To what degree will one be the subset of the other after we have met our design objectives?" It should not become a question of whose system drives the header design: records from all the participants need to be entered; the DOE collection will be preponderant in volume; NRC will be the critical user during the hearings; and, nothing in the LSS implementation should prevent the use of LSS as a records system by a given party.

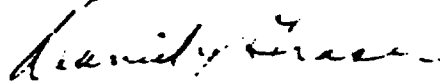
The LSS is to serve multiple purposes which include its use as a surrogate for discovery, a tool to support motions practice, and, the Commission's docket and official record for the licensing proceeding. We are now attempting to design an LSS which meets all of these objectives. Perhaps NUDOCS already meets most of these design requirements, but, it is my observation that NRC's existing methodologies, document type codes, detail document type, and other treatments are, in fact, constrained by NRC's existing hardware configurations and software capabilities -- as would be the LSS if it simply mirrored NUDOCS (or ARS, for that matter). The point is that these are already dated technologies to some extent, whereas we have a unique opportunity to let our required functionality drive the hardware and software we procure (rather than having to build an application using whatever computers and software happen to be available). Decisions about header design should be made in light of the LSS' unique objectives and what the LSS will allow us to do with the 'tabula rosa' of new technology. During design stages it is important to remember that the LSS does not have to inherit the baggage of DOE, NRC, and other parties' existing systems' limitations, be they hardware, software, or limitations inherent in a system designed for other purposes. At the same time, we recognize that products already developed, as represented by existing systems, can and must be used in building the LSS data base.

- I am suggesting that it is more important to determine what fields, field contents, and field formats are necessary to support the organization, search, and retrieval of a record in the LSS header and text environment. We need to do this with the intent of fully utilizing and maximizing the retrieval software's capabilities, as much as they may be anticipated. If we provide this sort of definition to the potential parties, each can begin the process of moving toward the acceptable LSS header record format with minimal rework being necessary at a later time.

A review of existing systems, such as your NUDOCS redesign effort, is useful in that it may provide a checklist of items that need to be addressed and is a source for lessons learned. On the other hand, close scrutiny of cataloging procedures used for our instrumented test bed is premature since the LSS header record formats are not as yet defined. The prototype cataloging procedures are not even a worthwhile point of departure for such a definition because the test bed environment does not attempt to define the anticipated LSS hardware or software environment -- it only emulates anticipated functionality in its study of the attributes which affect that environment.

I hope that these observations will be helpful in our mutual efforts to maintain the perspective of what our LSS design efforts should be based upon. We look forward to participating in the initiative where developing the LSS headers needed to meet LSS functionality is the primary design objective.

Sincerely,



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cc:
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