0481

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 6, 1996

MEMORANDUM TO: Margaret Federline, Acting Director
DWM/NMSS

THROUGH: Richard Weller, Acting Chief R. Weller
ENGB/DWM/NMSS

FROM: Donald L. Chery, Jr., Sr. Hydrologist D.L. Chery
Geosciences and Hydrology Review Section
ENGB/DWM/NMSS

SUBJECT: SUMMARY OF THE JANUARY 23, 1996, MEETING ON THE STATUS OF THE IMPLEMENTATION OF CONSOLIDATED DOCUMENT APPLICATION

PURPOSE:

The purpose of the meeting was to provide the status of the implementation of the Consolidated Document application (CDOCS) and the hardware upgrades for the NMSS Advanced Computer System. Discussions during the meeting resulted in clarification of the scope of the CDOCS technology transfer to be accomplished in FY96 as budgeted. A list of participants and a copy of the agenda are attached for reference.

SUMMARY:

A. Status of Implementation

At the NRC, 12 Unix staff clients, 1 Unix common use, 8 PC staff clients, and 1 PC support client had the initial Technical Document application installed at the time of the meeting. The NRC system administrators are currently occupied with the installation of the new hardware and a new server dedicated to CDOCS, and the transfer of CDOCS application to the new server, all of which are currently scheduled for completion on February 9, 1996 (now 3/15/96). The next task will be to install TOPIC client software on an additional 100 PCs which will provide access to CDOCS for an additional 100 NRC staff. Prior to making these installations, a single icon access to the CDOCS application for the NRC PC environment will need to be developed by NMSS and IRM. If this development can be accomplished readily, then it may be possible to complete the additional TOPIC installations by February 23, 1996 (now 3/29/96). However, IRM has contractual negotiations in progress that will mean a transition in contract support personnel which may affect the solving of the PC access issue and scheduling the installations. In March 1996, once CDOCS is stabilized on the new server and with the new clients, CNWRA will provide the new version of CDOCS for installation and the

Attachment: As stated

CONTACT: Donald Chery, ENGB
415-6614

426.1
NH16 1/1
WM-11

200047

9603200355 960306
PDR WASTE
WM-11 PDR

additional Regulatory Program Database to be added to the NRC databases. The CNWRA will be kept apprised of the NRC computer hardware and software implementation, and D. Chery will work with IRM and CNWRA to develop a schedule for the implementation of CDOCS.

The plan for implementation of the NMSS Advanced Computer System hardware upgrades is documented in the "NMSS Advanced Computer System December 1995 Hardware Upgrade Implementation Plan" (1/23/95 version distributed at the meeting). Because of office closing and the effects of installing WP Groupwise for UNIX clients, the schedules for the implementation have been extended. These schedules will be revised in future versions of the implementation plan.

B. Technology Transfer

The CDOCS application has been revised by the CNWRA, and the latest version is being implemented at the CNWRA. At the time of the meeting, the revised application was about 60% implemented at the CNWRA. The current budget for the CNWRA provides for 0.4 FTE for operations and maintenance of the system for the balance of FY96 (last 3 quarters). Due to the reduction in funding for the CNWRA, a management decision was made that there would be no further development of the CDOCS application at the CNWRA and that the responsibility for the application would be completely transferred to the NRC. The process of delivering the CDOCS code, installing it at NRC, training users, custodians, and developers in their respective functions, providing telephone support for the functioning system, preparing bug fixes to problems identified by users, and producing a system manual forms the basis of the "Technology Transfer" task. In summary, resources have been allocated for 0.13 FTE in cost for software maintenance and 0.27 FTE (for travel and 630 hours labor) for the technology transfer. The following activities are to be completed with this budget during the remainder of FY96:

1. Documentation

   CNWRA has budgeted a total of 160 hours for completing the documentation of CDOCS. The following three documents are involved in the technology transfer:

   a. Loading Plan (Custodian & System Administrator needs)

      The plan for loading documents into CDOCS was submitted by the CNWRA in September 1995, and NRC has recently provided comments informally to the CNWRA on the document. The revised budget, CNWRA's Operations Plan (January 1996), does not provide for any further work or revision of the "Loading Plan." As was discussed at the meeting, both the CNWRA and NRC need more experience with their respective document processing and loading operations before revising this document. CNWRA requested that the submitted load plan be accepted in fulfillment of the milestone and put any additional work on the plan into abeyance. CNWRA indicated that

reference could be made to the scanning and database custodian portions of the draft "User's Guide" and that additional needed information could be incorporated in the "Detailed TDOCS/CDOCS Program Manual" to be provided. It was noted that the submitted loading plan was essentially for the CNWRA operation and not the NRC operation; however, the NRC has accepted the CNWRA deliverable.

b. User's Guide

CNWRA will provide one document called a "User's Guide" which contains information on how to use CDOCS for all levels of users, the general staff, document custodian and system administrator. The first draft of this document was to be submitted within a day or two of the meeting. The CNWRA has budgeted no resources for any further work on the draft "Users Guide" for this fiscal year. If with use of the application, additional documentation or revision of the submitted "User Guides" is needed for adequate and proper documentation for NRC reference, then the NRC will make the necessary changes in the documentation.

c. Detailed Application Documentation

CNWRA will prepare and document, for the NRC staff, detailed information about the software application that has been developed. This documentation is the "Detailed TDOCS/CDOCS Program Manual." The information will detail the logic and structure of the C programs that have been written and their interfaces with the commercial software products, Oracle and TOPIC. The documentation will detail how to compile and execute the application. The documentation will detail how to install the client software on the platforms (PC and workstations) used in the NRC environment and the NRC network. The documentation will detail the structure and use of all databases and their use in the application. The documentation will completely describe how databases are loaded and maintained by the NRC document database custodian and the processes and programs used to synchronize select portions of databases between NRC and CNWRA. All information necessary for the NRC system administrator to maintain and keep the application functioning is to be documented. The documentation is to provide the NRC system administrator with a thorough understanding of the CDOCS program developed by the CNWRA. Sufficient detail is needed to run and maintain the program as well as to make modifications and changes to the program for the NRC environment now that these functions are being transferred from the CNWRA to the NRC. The documentation should be complete and sufficient to allow for complete transfer of the entire application to the NRC.

2. Final Installation of CDOCS

CNWRA indicated that it will require 230 hours to deliver the latest version of the full-text/image storage, search and retrieval application,

CDOCS, to NRC. This activity is to "package the code," "install" the latest version of the application at the NRC, "test" operation of the CDOCS application at NRC, and "test the synchronization" of databases between the two locations. Immediate fixes to problems from final installation are included. One trip to the NRC is proposed for this activity. As with previous versions of the application, both compiled and source versions of the application program are to be delivered. The application will not be accepted by NRC until the source program has been compiled on the NRC computers, and it is verified that the application functions exactly as the compiled version provided by the CNWRA. To do the compilation, NRC needs to obtain the software Galaxy, by Visix Software, a fourth generation language development tool that was used by the CNWRA. It is estimated that this necessary software will cost about $9,500 per computer operating system. Thus, for the three operating systems in the NRC environment, the total cost will be about $28,000.

With the transfer of the CDOCS application to the NRC, the need for some type of configuration management control to assure that the two applications function similarly was discussed. Specifically, the control system would need to be a formal process completed prior to any change to CDOCS that would require review and sign-off by appropriate NRC management. CNWRA indicated that it already had a Technical Operating Procedure that could be modified for NRC use. Karen Vanduser indicated that IRM had a configuration management control system tailored for NRC computer applications. M. Federline requested that S. Wastler obtain copies of these materials and that staff prepare a configuration management control system for CDOCS.

3. Training

CNWRA proposed 80 hours of training as part of the technology transfer and would require two trips to the NRC. CNWRA indicated that the training would be at two levels, one tailored for staff users and another designed for system administrator, operator, and developer personnel. As a result of discussions of the training, NRC recommended that CNWRA should use one of the trips for training NRC's Professional Development Center staff to carry out staff training in the future. The possibility of videotaping CNWRA's training session was also suggested. As a result, D. Chery is to contact the NRC Professional Development Center to discuss the feasibility of this recommendation.

4. Telephone support and problem fixes

CNWRA has budgeted 160 hours for telephone support and problem fixes for the remaining months of the fiscal year after the installation of the revised version of CDOCS at the NRC. The CNWRA estimated that this activity would take 20-25 hours per month (about 8 months of support).

C. Additional Issues

1. Upgrades

The CNWRA has estimated and budgeted, for its own operations, 0.13 FTE for maintaining the commercial software products used in CDOCS for the ongoing use of CDOCS by the CNWRA staff. This funding covers, in part, the annual maintenance for the commercial components of CDOCS (ORACLE and TOPIC, Galaxy for compilation for the supported platforms, and the software quality tools PURIFY and QUANTIFY). The existing annual maintenance for these software products provides telephone support and version software upgrades. However, for TOPIC 4.0, Verity has made a major revision of its product, called TOPIC Agents, which has been released and is now in a second version (1.2.1). To implement this revision of TOPIC in the CDOCS application will most likely mean paying for a trade-up cost for the major revision and definitely will require CDOCS program revisions. As with all major changes in a product, at some point Verity will no longer provide support for TOPIC 4.0. It is the NRC's understanding from Verity that "official" support for Topic 4.0 will be discontinued at the end of 1996. The CNWRA estimates that the application can function satisfactorily for 1 to 2 years, but eventually this upgrade would need to be made. Thus, management needs to be aware that such development will be required for the life cycle maintenance of the CDOCS application. Another example of modifications that will need to be made to CDOCS will be when NRC makes the change to the planned upgrade of WordPerfect 5.1(DOS) to WordPerfect 6.1 (for Windows).

The costs for major upgrades, changes in program architecture, and customization of some application for use on the PCs will need to be considered. In the meeting, IRM indicated it has not budgeted or planned the staff to support such activities. Since the meeting, NMSS has submitted documentation for the IRM Information Technology call that covers the necessary IRM support for the TDOCS/CDOCS application. M. Federline requested that the NRC staff develop a plan for upgrade and maintenance of CDOCS.

2. Database Loading and Maintenance

Discussion of the loading plan prompted a related discussion regarding the source of funding for the actual loading of the documents and whether criteria existed for determining what documents get loaded on CDOCS. CNWRA indicated that while CNWRA Operations tasks would have some minimal funding to load some contract or administrative documents, funding for the loading of technical documents would be provided by the individual Key Technical Issues (KTI) teams. With regard to existing criteria, CNWRA indicated that the existing loading plan did not provide any criteria to be used to select a document for loading. Therefore, M. Federline requested that the NRC staff develop a set of criteria for use by the KTI teams.

ACTION ITEMS:

The following action items resulted from the meeting:

1. D. Chery, working with CNWRA, is to develop a schedule for the implementation of CDOCS at NRC.

2. CNWRA plans to submit a draft of the User's Guide within a day or two of the meeting. [Draft User's Guide was received January 25, 1996.]

3. S. Wastler should obtain copies of configuration management documents from IRM and CNWRA. D. Chery and IRM are to prepare a configuration management control system for CDOCS.

4. NRC suggested that CNWRA should use one of the trips for developing a training program with the NRC Professional Development Center staff to carry out future CDOCS training for staff. The possibility of videotaping CNWRA's training session was also suggested. As a result, D. Chery is to contact the NRC Professional Development Center to discuss the feasibility of this recommendation.

5. D. Chery is to develop a plan for upgrade and maintenance of CDOCS.

6. NRC staff is to develop a set of criteria, for use by the KTI teams, to determine what technical documents will be loaded into CDOCS .

7. CNWRA resources of 0.13 FTE in cost for software maintenance and 0.27 FTE (for travel and 630 hours labor) for the technology transfer task are required to provide technology transfer. CNWRA's revised FY96 Operations Plan should reflect the breakdown of tasks, as described in the above meeting summary, and is to be completed within budget during the remainder of FY96.

*Central File

DISTRIBUTION:NMSS R/F ENGB R/F B. Meehan, ADMIN PUBLIC
BStiltenpole, PMDA CSeelig, PMDA KVanduser, IRM DGraser, IRM
SFortuna, PMDA KMcConnell RWescott JThoma
JAustin E. Depukat V. Drilea

DOCUMENT NAME: S:\DWM\ENGB\DLC\MTGSUM.DLC

OFC	ENGB		PAHL		PAHL		ENGB		ENGB	
NAME	DChery:cc		SWastler		JThoma		DBrooks		RWeller	
DATE	3/5/96		3/5/96		3/5/96		3/5/96		3/6/96	

OFFICIAL RECORD COPY

ACNW: YES X NO ___
IG : YES ___ NO X
LSS : YES X NO ___

Delete file after distribution: Yes ✓ No X

JANUARY 23, 1996
NRC/CNWRA TELCON REGARDING CDOCS
ATTENDANCE LIST

NRC:

J. Austin
J. Badrian
D. Chery
E. Depukat
V. Drilea
M. Federline
C. Herring
J. Thoma
K. Vanduser
S. Wastler

CNWRA:

H. Garcia
A. Dewispelare
R. Johnson
R. Marshall
W. Patrick
B. Sagar

January 23, 1996

TDOCS/CDOCS Discussion Items:

1. Status of Implementation

12 Unix staff clients, 1 Unix common, 8 PC staff clients, 1 PC support client
TDOCS/CDOCS (Presently only TDOCS) Server Install - 2/9/96
Install 100 PC client licenses - 2/23/96

2. Technology Transfer

160 hrs. Documentation -

Load Plan (Custodian & System Admin. needs)

Users Guide (System Manual)
Staff
System Admin.
Document Manager

230 hrs. Install CDOCS Application (1 trip proposed)
(package, install & test at NRC, and synchronization between two locations)
Source program compilation (Galaxy)

80 hrs. Training (2 trips proposed)
User training
System admin. training

160 hrs. Telephone support & problem fixes

3. Additional Issues

Upgrades
Topic (new collections architecture)

Database loading and maintenance (at CNWRA by KTI)

Given "Technology Transfer" - Discuss responsibility for future development, upgrades (i.e. OS, etc.),and maintenance.

Attachment