P BWXT Pantex

MAY 2 0 2003

Mr. Daniel E. Glenn, Manager
U. S. Department of Energy
National Nuclear Security Administration
Pantex Site Office
P. O. Box 30030
Amarillo, TX 79120-0030

Subj: NNSA/PXSO Memorandum, Glenn to Mallory, dated May 1, 2003, Comments to BWXT Pantex
Response to Move Right System, Interactive Electronic Procedure System & Software Quality
Assurance Concerns Cited by DNFSB and NNSA PXSO

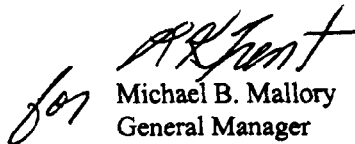Ref: Letter to Daniel E. Glenn of May 12, 2003

Dear Mr. Glenn:

This letter provides an updated schedule of the Software Quality Assurance (SQA) activities for the
Interactive Electronic Procedures (IEP) system. The attached schedule reflects the increased depth and
rigor of validation testing to assure quality and readiness of this safety-related system. The principal
difference between the attached IEP schedule and the initial schedule submitted May 12, 2003, is six
weeks of additional validation testing. Software and migration package testing includes rigorous validation
of the commercial off-the-shelf software (COTS), BWXT Pantex customizations, and all system interfaces.

BWXT Pantex is committed to assuring the SQA program will provide the defined results with confidence
and credibility.

If you have any specific questions on the actions, please contact Gary E. Pool at 477-3782 for details.

Very truly yours,

Michael B. Mallory
General Manager

Attachments: as stated

PSI-03-17752-141-GM

APPENDIX C
IEP SQA ACTION PLAN
UPDATED 5/15/2003

Actions	Scheduled Completion
Publish all IEP Solumina SQA documentation with all necessary reviews and approvals. Over 120 documents have been identified to complete this activity including the following items:	6/30/2003
o Updated Requirements Specification (RS) and Quality Requirements (QR). Updated RS includes all functions (both COTS and customization) and additions since procurement.	
o Software Safety Plan (SP) updated with identification of safety elements in the system and flow down into all other SQA documentation.	
o Maintenance Procedures and Plans (MP) that document tasks required to coordinate and modify software components of the IEP Solumina system across five sites.	
o Individual Design Descriptions (DD), Test Plans (TP), and Installation Plans (IP) for each component of and interface to the IEP Solumina system. This includes documentation of contingency plans for missing or corrupted interface data identified in the Software Safety Plan (SP). Test Plans will be detailed to include overall system testing procedures, test cases with positive and negative outcomes, regression testing, and test results.	
o IEP Solumina System Technical Characteristic (CE) documents include: System Architecture, Product Definition, and Qualification Strategy (SNL).	
o Materials Lists including a Flow Chart (FC1A2738) for the entire system and ML for each system component and interface.	
o Education Plan (EP), describing training plans of instruction (POI) for all system users and technical training requirements for application developers and Help Desk personnel.	
o User Documentation (UD) includes User manuals (4 volumes), Writer's Guide, and Plant Standard on the IEP System.	
Complete Human Factors evaluation of the IEP Solumina shop floor interface and publish evaluation report (SNL/LANL).	5/31/2003
Perform a Gap Analysis between the current IEP SQA Documentation and the new SQA Program requirements.	6/30/2003
Provide a resource-loaded schedule for SQA plan activities to NNSA/PXSO.	6/30/2003
Complete Validation Testing of IEP System. This includes validation of COTS Solumina software, Pantex customization, and all system interfaces. Testing will be performed twice, once for validation of software, and second time for validation of the migration package.	8/15/2003

Actions	Scheduled Completion
Complete Qualification Requirements (PQ), which includes requirements to qualify the system at each remote site, at the software component level, the application functionality level, and the overall system level (SNL/LANL/LLNL).	7/30/2003
Complete Qualification of the IEP Solumina system by issuing six QERs: one for each remote site, software components, application functionality, and the overall system (SNL/LANL/LLNL).	9/12/2003
Complete Readiness Verification of the IEP Solumina System by issuing BWXT Pantex readiness letter.	9/15/2003
Complete IEP Nuclear Explosive Safety Master Study (NNSA).	10/31/2003
Maintain documentation of problem tracking and resolution as detailed in the QR, and follow SQLC for enhancements to the IEP Solumina System as detailed in the MP documents.	On-going

cc: D. White, PXSO, 12-36A
        D. Brunell, PXSO, 12-36A
        E. Burkholder, PXSO, 12-42U
        E. Demerson, PXSO, 12-28
        S. Erhart, PXSO, 12-36A
        H. Griffith, PXSO, 12-36A
        G. Wisdom, PXSO, 12-36A
        E. Hogan, PXSO, 12-28
        M. Reaka, PXSO, 12-36A
        M. Mallory, General Manager, 12-69A
        D. Swaim, Dep. General Manager, 12-69A
        B. McBride, CFO, 9060A
        S. Baker, PAC, 12-6D
        M. Carry, Campaigns, 12-69B
        J. Clayton, DSW, 12-69B
        C. Durham, Eng., 12-6F
        D. Hampton, HR, 16-12C
        V. Hughes, QA, 12-6D
        J. Jones, Legal, 12-100A
        S. Kennedy, DSW, 12-69B
        R. Madison, RTBF, 12-69B
        G. Pool, PSI, 12-69C
        J. Yarbrough, Mfg., 12-6F
        C. Moore, Infrastructure, 12-5G
        J. Noon, S&S, 12-36B
        L. Trent, ES&H&ES, 12-69A
        B. Pascal, IT, 12-106
        B. Crabtree, IT. 12-106
        C. Bowen, PSI, 12-2B
        H. Haines, Eng., 12-6F
        J. Crockett, IT, 12-106

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