

Item ID	Owner	Division	Review Title	Review Date	Due Date	Status	Item Description	Response
499	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	Create COO consistent with DOE 5480.18	The COO has been written, reviewed by ASD, ES&H and QA. It has been posted on the ASD Operations web page. The link has been sent to the ARR committee members. The link is: http://www.sns.gov/projectinfo/operations/COO/index.htm
500	Harrington, Mike	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	Consolidate the criteria for shielding	Proposed resolution: the criteria for shielding and the objectives for control of radiation levels are specified in the Final Safety Assessment Document (FSAD) for FELK, Section 4.2.1 RADIATION BARRIERS, which presents the approved "SNS Shielding Policy," and which contains design radiation level criteria and other objectives and requirements for shielding. Operational aspects of shielding are being addressed in a suite of operational procedures. A different procedure ("module") addresses each different operational aspect. The accelerator operations procedures section on shielding currently has seven approved and draft procedures that address various operational aspects of shielding, such as shielding design review, configuration control, and inspection. Operations has expressed a preference for this approach, i.e. having the basic criteria and objectives in the central "FSAD for FELK" document with different operational aspects in different OPM procedure modules.
501	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	Resolve discrepancies in the stated design objective.	Discrepancies have been resolved between design objectives in the recently approved OPM 2H7.4
502	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	Resolve the apparent misassignment of authority for approval of shielding design.	Approval authority has been resolved in the recently approved OPM 2H7.4
503	Haines, John	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	Review of SNS Shielding Design (SNS-OPM 2.H-7.4)	The SNS Radiation Safety Committee conducted an independent review of accelerator shielding through CCL3 commissioning on December 6, 2002. The shielding planned for normal accelerator operations was also described as well as the preliminary plans for shielding during CCL4 commissioning. A list of action items requiring follow-up responses were identified.
504	McKenzie, Samuel	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	Develop a self-assessment program that routinely verifies that workers in the field are following the SNS LOTO program.	Per the SNS Lockout/Tagout Procedure (LOTO) each division shall conduct an annual audit of the LOTO Program. In January 2003 we completed an audit of the Accelerator System and Conventional Facilities Divisions. This audit included interviews of both authorized and affected personnel as well as evaluation of the active devices. The report can be seen at the ProjectWise site: ProjectWise/Saved Searches/Global/Transmittals/Project Office/PS-0097
505	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	9/1/2003	Closed	Establish a consistent review procedure describing appropriate levels of review and approval by subject matter experts including quality personnel.	For the SNS Operations Procedures Manual (OPM): a standard "Review Tracking Sheet" has been established for each OPM procedure. It specifies which safety committees, and Division Technical reviews are required. It further specifies the actual reviewer names and dates, and required approvals.
506	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	9/1/2003	Closed	Establish requirements for inclusion of documents on the division's web site.	For the SNS Operations Procedures Manual (OPM): Draft and Approved documents are both allowed on the web site. Draft documents are designated as such in large bold letters at the header of each page of the procedure. Approved procedures are designated as such by the phrase "Signature on File" on each of the approvers signature line. The hard copy with the actual signatures is given to the DCC for archiving.
507	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	A post startup critique of the certification test procedure preparation, execution and post execution review processes should be performed. This should be completed prior to commissioning of DTL-1.	ASD has reviewed the method of generating PPS certification test procedures and has elected to generate a new procedure to control this process. This procedure contains requirements for the various parties involved and outlines the process to be followed during the development of the certification procedure. A copy of the procedure is attached.
508	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	The required beam intensity reduction factor should be determined.	Beam intensity reduction factor was measured. A report detailing the procedure and results is available as ASD Tech Note 98. A copy of the Tech Note was distributed to the ARR Committee.
509	Alekandrov, Alexander	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	Each of the beam shutoff devices should be evaluated against the established reduction requirement and the result documented. If direct measurements are made, transmission should be optimized.	Effectiveness of the beam shut off devices has been verified experimentally during the Front End commissioning. Methodology and results of beam extinction measurements are summarized in the SNS Technical Note #0098.
510	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	The security of the firewall should be evaluated, tested and the results documented.	An audit of the PPS network security was performed by Dave Thompson. This audit determined that additional measures could be taken to improve the security of the PPS PLCs by modifications to IOC and PLC software and by physical modifications to the private PPS Ethernet network. These measures have been incorporated into the design of the phase 0 PPS equipment. A document is attached that contains the audit report and the travelers that document the completion of this work*. * All of the recommendations have been completed except for removing the gateway addresses in the PLC Ethernet adaptors. This will be accomplished during the next PPS PLC software revision for phase 0.4 (see TACL IC-0018 step 11) to be completed on or before June 16, 2003.

511	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	5/1/2003	Closed	The desirability of having a PC attached to each PPS network should be justified. Alternative solutions should be considered.	A procedure (attached) has been developed that requires that the PC workstation used to program the PPS PLCs be disconnected from the private PPS network when the workstation is not in use.
512	Gibson, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	A maintenance plan for the Front End and DTL systems needs to be developed prior to the next commissioning module (DTL).	As equipment is installed, each ASD group has taken responsibility for the preventative and required maintenance for their systems. Plans have been developed for all systems such as vacuum, water, controls, etc. and are being executed as time and system availability allows.
513	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/17/2003	Closed	The maintenance plan/procedures need then to be added to the general SNS procedure system and be kept current.	We do not intend to keep the maintenance plans and procedures in the Operations Procedures Manual. Rather, we have purchased a Computerized Maintenance Management System, Datastream's 7i. We will use 7i to link to the maintenance plans to procedures and other documents, kept in Projectwise. This system is being implemented by ASD Operations and MIS.
514	Howell, Mary Lynne	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/16/2003	Closed	The barcode Equipment Tracking system should continue to be used and the Computerized Maintenance Management System should be implemented as soon as is possible.	The Bar Code Equipment Tracking System is continuing to be utilized to uniquely identify the equipment by the lead engineers. In addition, the first data (diagnostics equipment and power supplies) from the Equipment Tracking System (ETS) have been imported into DataStream (Computerized Maintenance Management System) successfully from the ETS. MIS continues to work with Accelerator Operations to fine tune the system, which will be an ongoing process to ensure success of the additional phases.
515	Gibson, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	Front End system engineers must ensure a robust maintenance program is in place until the procedures and automatic trending and tracking system is operational. Group Leaders and management should determine if the system engineers have the time and the focus to ensure a strong maintenance plan is in place and is on going, until the more automatic system comes fully on line. A routine self-assessment of the manual system by QA would be appropriate.	We have documented the requisite preventative and regular maintenance issues associated with the Front End Systems. Since all of the ASD groups have accepted responsibility for their equipment, each has generated a spreadsheet and interval for their associated items. These plans are being executed to maintain system performance between and during commissioning periods.
516	Holtkamp, Norbert	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	9/1/2003	Closed	Reinforce safety as a value at SNS. This should be a top-down exercise wholeheartedly led and endorsed by the SNS Director and all SNS line managers.	This is a continuing exercise and several things have been done to endorse safety. I meet regularly with the divisions safety officer (once a week) or so or go together with him through the accelerator area and look at installation, JHA's, discuss with people to make sure they understand the issues in their area. The safety officer generates a report and sends it to me via email. He tracks items and makes sure they get closed out. In addition, in regular group meetings safety concerns are brought up. Also in the weekly staff meeting. I have advised (told) the group leaders that as a part of their performance planning, I want to see safety. Typically 20% of their overall performance is based on safety only. They did the same with their people. It is also part of my performance plan towards Thom Mason
517	Herron, Suzanne A.	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	9/1/2003	Closed	Prior to beginning the commissioning of the DTL, SNS should implement a robust process to identify, evaluate and resolve findings and make its use a requirement for all action items that result from external and internal reviews. In general, we recommend that this requirement should apply, in a value-added approach, to action items from all project reviews including, for example, equipment design reviews.	The SNS has implemented a project wide, web-based, corrective action tracking system for managing recommendations and corrective actions from assessments and reviews. Unlike the ORNL Assessment Tracking System that requires a UCAMS user id and password for interaction, this system is accessible to all staff members from all SNS partner labs through the use of Facebook authentication. The system thus allows full access to enter action items, provide responses to items, submit items for closure and requires approval of closure of items by the appropriate Division Director. Recommendations and action items from all major reviews are input to this system, owners established for the items, due dates assigned, and proper approvals selected. The system automatically sends an e-mail to the owner notifying them that an action item has been assigned to them and providing a link to the corrective action tracking system where the action item may be reviewed and a response provided. Action Items that are input and tracked in the SNS action tracking system include: · Recommendations from all DOE semiannual reviews · Other DOE reviews including external independent
521	Holtkamp, Norbert	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	R2A2 Review for ASD Director and Group Leaders	Review conducted 18/Oct/02
522	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	A start up checklist for the on-duty operations personnel that indicates all items in the CASE have been completed prior to operations with beam must be in place. The items on this list must be approved by the Operations Manager prior to placing it in the TCR. Each item on the start up checklist in the TCR must be signed by the relevant responsible Group Leader or systems specialist. The on-duty Chief Operator must sign the completed checklist prior to beam	Addressed in OPM 6.E
523	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	A procedure should be written to establish criteria under which a complete set of radiation surveys are required	This is addressed in OPM 2.H7.5
524	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	A procedure is needed to establish criteria under which additional shielding and/or personnel exclusion measures will be implemented and the process for implementation.	This is addressed in OPM 2.H8

525	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Sign off and train on SNS OPM2.G2 Electrical Safety Implementation Plan	Training conducted on 10/27/02.
526	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Sign off and train on SNS OPM2.G3 Electrical Safety Working Hot	
527	Holtkamp, Norbert	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Prohibit Work Hot until SNS OPM2.G3 authorized and personnel are trained. If working hot is necessary, a JHA must be written and followed.	Work prohibited by ASD Director. 29/Oct/02.
528	Eckroth, James	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Assure that installation and acceptance testing of the fire detection and protection systems in the Front-End building are completed and approved by ASD	Signed off 28-Oct-02
529	Eckroth, James	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Assure that installation and acceptance testing of the fire detection system in the Klystron Building is completed and approved by ASD	Signed off 28-Oct-02
530	Kornegay, Frank C.	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Because the SNS FUA is not complete, some formal agreement between ASD and the ORNL Fire Protection organization is developed and approved so that ORNL assumes responsibility for operating, maintaining and periodically testing the completed fire detection and protection systems.	MOA Signed 29-Oct-02
531	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	9/1/2003	Closed	Consider establishing a development area for unapproved and in process operating and administrative documents so that only approved documents are included on the current procedures site.	DRAFT documents clearly labeled on web page.
532	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	PPS Checklist - See attached Checklist	Checklist completed
533	Giannella, Mario	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	The certification test procedures should be prepared sufficiently in advance to permit review and rehearsal prior to formal release and use.	Checklists approved prior to dry-run of certification.
534	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Documentation of the installation and testing of the chipmunks is to be prepared prior to commissioning of Front End.	Documentation Complete
535	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	All system keys are accounted for and spares are in secure storage as per SNS-OPM 3A-8.1 prior to the start of PPS certification testing.	Keys in locked keyboxes in Front End Control Room
536	Wright, Paul	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	The secure location of the operating software CD-R and backups be determined and documented prior to the start of PPS certification testing.	CD-R locked in Front End Building PPS Cabinet
537	Harrington, Mike	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Ensure system description documents are approved prior to Front End commissioning.	Documents complete and approved
538	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	A CASE procedure that identifies ASE requirements and operating limits, safety systems and individual responsibilities necessary for Front End commissioning only must be developed.	Included in OPM 2-B.1
539	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	The operator response procedure that is used to respond to the differential current monitor alarms in the Front End must be in place. The current monitors must be installed and operating and interfaced with the EPICS systems. Setpoints corresponding to some fraction of the allowed beam loss, identified in the CASE for the Front End, must trigger alarms that alert operators to action.	Addressed in EPICS alarm handler
540	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Locking out the accelerator when not manned by operations personnel must be formalized and a system developed that does not involve the PPS.	Addressed in OPM 3.A-1
541	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	Electronic logs or written logs must be set up to record daily orders and long term orders to operations personnel. Procedures for maintaining these logs current must be defined.	Addressed in OPM 1.B-2
542	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	The use of call down lists that identify support group contacts must be completed.	Call down list in CCR

543	Dodson, George	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	10/28/2002	Closed	The PA system is complete for Front End use; however, direct communications between operators in different parts of the Front End building must be in place prior to operations with beam.	PA Functional and Certified
544	Skonicki, Michael	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	Proactive management consideration should be given to an effort to determine the current degree of alignment between the SNS quality plan and related systems and processes and the management systems and subject areas described within the SBMS. This can be a part of the comprehensive organizational needs assessment directly related to the logical progression of overall programmatic emphasis from a construction to an operations perspective.	The SNS QA plan has been reviewed and revised to ensure it is in harmony with the SBMS, and is awaiting DOE approval. Only minor editorial changes were needed. Much of SBMS can be used directly by SNS because the project has only created a minimum number of procedures, which are normal extensions of SBMS just as they are overlays on all partner labs QA programs.
545	Skonicki, Michael	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	Three suggested areas for initial review are: Performance (Self) assessment, Critiques, Lessons learned	The ORNL SBMS can be used directly for SNS/ORNL in these areas. No need for a project-wide special treatment has been identified in SNS QA procedures or plans.
546	Skonicki, Michael	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	Provide management and staff with an effective, easy-to-use, paper-light self assessment process whereby they may find and fix their own problems before they become significant. Provide management and staff with guidelines concerning a consistent method for reviewing problems, minimal documentation of the results, and appropriate sharing of lessons learned. Effective use of e-mail for these activities can enhance the development and deployment of a staff-friendly system.	An appropriate process is in use for the primary work of the SNS, which is the creation of a new facility for science. The QA program is focused on management and use of acceptance criteria as a means of planning for assessment and identifying problems in the details of this mission. A simple procedure, forms, and database are used. Additionally, an internal audit program is conducted by or partnered in, by the QA staff. For example, a team approach was used successfully for the Installations audit and the Lockout-Tagout assessment. The SNS action tracking system was used for tracking and closure of deficiencies requiring corrective action, the same as for this ARR and periodic DOE reviews. These are streamlined but formal systems.
547	Skonicki, Michael	AS	Front End Accelerator Readiness Review October 2002	10/1/2002	6/18/2003	Closed	Establish consistent management expectations concerning procedure development, content and status tracking.	The procedure development procedure, SNS-QA-P02 describes the process. The ASD Operations Group are the primary procedure developers at this time, and they are making use of the process described.