Office of Project Assessment—Project Review Summary

SAMPLE/GUIDE FOR PREPARING SUMMARY

1. Summary should ideally be prepared 1-2 days after DOE review by the Program Office (in coordination with the Office of Project Assessment, and if necessary the Federal Project Director).

2. Use sample report (attached) for reporting format.

3. Summary should be no longer than 2 pages.

4. Use bullets.

5. Highlight key points.

Office of Project Assessment—Project Review Summary

SPALLATION NEUTRON SOURCE

DATE: November 16-18, 2004
LOCATION: Oak Ridge National Laboratory
COMMITTEE: Members 28, Observers 9 (including DOE HQ IG)

SUMMARY:
Overall, the Committee judged that the **project is on track to meet its Level 0 technical, cost, and schedule baseline objectives**. The **biggest challenge is maintaining adequate installation and commissioning progress within the limitations of the project's FY 2005 Budget Authority (BA = $113.6M).** Contingency management is also still a major concern. Both SNS and ORNL management need to redouble their efforts to conserve contingency and identify cost saving opportunities.

1. Project Status as of September 30, 2004

(Relative to the Level 0 Baselines in the SNS Project Execution Plan)

▪ TEC:	$1,192.7M	
▪ TPC:	$1,411.7M	
▪ Percent Complete:	Planned: 88%	Actual 87%
▪ Project Completion date:	Baseline: 6/06	Forecast: 6/06
▪ Contingency:	$17.8M or about 20% of remaining TEC work, based on Estimate-at-Completion (EAC).	
▪ ES&H	Over 5.6 million work hours (construction Site and SNS/ORNL) with one lost workday away injury. No environmental concerns.	

2. Technical

- **Technical performance** since the last review (May 2004) **is impressive**.
- The "warm" Linac (Drift Tube Linac (DTL) and Coupled Cavity Linac (CCL)) has been assembled, and the DTL and 3 of 4 CCL modules have been commissioned.
- All of the klystrons have been delivered and installed in the klystron gallery.
- Production of superconducting cryomodules at TJNAF is nearing completion ahead of schedule (all 81 cavities have been fabricated and tested – they exceed the performance specs).
- Ring component delivery by BNL is on schedule. The 4.5 degree K cryoplant has been commissioned.
- Conventional construction of the Central Lab Office (CLO) and Target Buildings is to be competed by the end of February 2005.
- **The major remaining technical challenges** (i.e., risk areas) include: the Target Systems installation and Ring Systems commissioning schedules; fabrication of the Target inner reflector plug; and commissioning of the 2 degree K cryoplant and Superconducting Linac (SCL).

Issues/Recommendations:

- Cold-test a high-beta cryomodule at SNS as soon as reasonably possible.

3. Cost

- Although the cost variance is near zero, the Committee has remained very concerned about the overall cost situation. Contingency (based on the EAC) has continued to drop ($25.3M to $17.8M since May 2004, most of it in Conventional Facilities). There is also about $13M of undistributed budget remaining in Other Project Costs.

Issues/Recommendations:

- Present a current EAC and identify additional cost savings to meet a contingency target of 20% of remaining work by the next DOE review.

4. Schedule and Funding

- The project is managing to an early finish date of April 30, 2006, whereas the official project completion milestone is June 30, 2006. This is a slip of 1 month since the last DOE review, brought about by replanning work to fit within the FY 2005 BA limit – specifically by slowing the pace of accelerator installation, and deferring the start of Ring commissioning and procurements for the last two project instruments until early FY 2006.

Issues/Recommendations:

- Preserve the 2 months of schedule contingency at least up to the next DOE review.

5. Management

- The SNS management team continues to competently manage the project. Relationships among the SNS Partner Laboratories, DOE, and other stakeholders (including the State of Tennessee) have remained positive. By now, three of the Partner Laboratories (ANL, LANL, and LBNL) have transitioned off of the project and agreements are in place for the other two (BNL and TJNAF) to follow by the end of March 2005.
- The ORNL Director has remained actively engaged in SNS.
- In June 2004, the project staff successfully relocated to the partially finished CLO Building to avoid additional lease costs for their previous office facility.

Issues/Recommendations:

- **Deferring the start of Ring commissioning to FY 2006 has added an uncomfortable level of risk to the project. SNS management needs to advance the start of Ring commissioning** to assure that the project meets its CD-4 schedule milestone.

6. Action Item

1. DOE/SC to conduct the next DOE Semi-Annual Project Status Review during June 21-23, 2005.