

# PSS Gen-1 Review Items

August 5, 2005

## Design & Operational Testability Compliance & Improvements

	Item	Comment/Question	Responses	Response Rating
1.	DOE G 420.B Section 2.B.3.a.5.iii (a & d) White and black box testing	How do we comply with white box testing?	Black box in field and white box via lab simulator	2
2.	Test coverage compliance DOE & ANL ESH	Extent of normal and off normal testing. Improve efficiency/order of test cases in validations.	Verify that as a minimum complete set of functional test cases are derived from requirements specification. Use the requirements specification to guide test coverage. Also, test cases should be developed by a team.	2
3.	Non intrusive testing features	Eliminate the need to remove field device connections during annual validations. Eliminate the need to "Lock" validators in stations to complete validations.	This should be done. It could mean more embedded test functions at the FE PSS and BL PSS.	2
4.	Review the structure of the PSS Gen 1 PLC Code.	Should faults be handled differently? Review the use of subroutines in the PLC Code. Review the structure of the PSS G1 code with the respect to G3 code. (e.g. definition of beamline segments, branch beamline logic allows some shutters open during PSS faults).	This should be done.	2

### Response Rating Key

1 = Should be done ASAP

2 = Should be done but not ASAP

3 = Might be done but needs more review/information/or variance

4 = Not necessary or already being provided.