
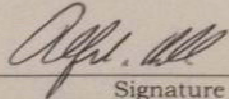
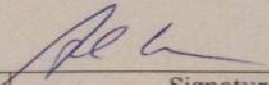


Appendix N

NSTXU Safety Certificate

 PPPL PRINCETON PLASMA PHYSICS LABORATORY		SAFETY CERTIFICATE	
LOCATION (Site, Area, Bldg., Room, etc.) D-Site Bldgs and C-Site NSTX Control Room			
ACTIVITY (Brief Description) Operate NSTX-Upgrade (NSTX-U)			
LIMITATIONS: <ol style="list-style-type: none"> Maximum neutron generation rate from plasma operations is 4×10^{18} DD neutrons/year per the running total required by OP-NSTX-015, "NSTX-U HPP Daily Operations." Operation of the Bakeout Systems may be performed to heat the plasma facing components (PFCs) to temperatures up to 350°C and the torus vacuum vessel to temperatures up to 150°C per OP-G-156, "NSTX Integrated Machine Bake-out Operations." Boronization with deuterated Trimethylboron (dTMB) may be performed with no more than 50 grams of TMB at risk in the NSTX-U Test Cell at any time per OP-G-155, "NSTX Boronization using TMB." The total maximum active elemental lithium inventory in the NSTX-U Test Cell during an experimental campaign will not exceed 2,000g per OP-VAC-762, "NSTX LITER Operating Procedure." No access into the NSTX Test Cell is permitted during plasma operations or when the NSTX-U toroidal or poloidal magnetic field coils are energized by high-power supplies. Complete OP-NSTX-014, "NSTX Machine Operation Guide for Startup and Shutdown" each run day. 			
CONDITIONS FOR OPERATIONS: <ol style="list-style-type: none"> Controls are implemented per Chapter 5 of the NSTX-U Safety Assessment Document (SAD). COEs are trained in the requirements of the NSTX-U Safety Assessment Document (SAD) per OP-NSTX-012, "NSTX-U Operations Training." The criteria of procedure OP-NSTX-02, "Startup of NSTX-U" must be satisfied. The machine operating parameters will be bound by the most recent completion of ISTP-NSTX-001, "NSTX Coil Energization Tests". 			
RESPONSIBLE LINE MANAGER:			
Alfred von Halle			4/10/2015
Print Name		Signature	Date
APPROVED BY (ES&H/EB Chairperson):			
Adam Cohen			4-10-15
Print Name		Signature	Date
ACTIVITY COMPLETED (Dated and Signed by Responsible Line Manager)			
Print Name		Signature	Date