

Design Review Documentation - Results No.:

Title: In-Vessel Shutter Material Modification Peer Review

CAT: ☒ A1 ☐ A2 ☐ A3

Type of Review: ☒ Peer ☐ CDR ☐ PDR ☐ FDR

Cognizant Individual: A. Cao

Date of Review: 2/19/2020

Review Board Members:

Chair: T. Stevenson

RE B. Stratton

CE R. Ellis

TA

S. Gerhardt

TA D. Cai

TA P. Titus

PE Y. Zhai

QA F. Malinowski
A. Castaneda

ESH N. Gerrish
H. Wetzel

Attendees:

B. Blanchard

R. Bell

P. Dugan

R. Hawryluk

J. Ilagan

A. Indelicato

D. Niemenski

Marlo Ramos

Attendees:

Items Reviewed:	Sat.	Unsat.	Comments or n/a if not applicable
Appropriate requirements identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Development plans and schedules	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Reg. compliance incl. USI/USID and NEPA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Disposition of CHITS from previous reviews		<input type="checkbox"/>	<input type="checkbox"/> n/a
Calculations (all listed are signed and filed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Cost objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Other review objectives addressed	<input type="checkbox"/>	<input type="checkbox"/>	n/a

SUMMARY OF RESULTS:

The purpose of this peer review evaluated the updated disruption loads and the proposed material change necessary for qualifying the in-vessel shutters. In addition, qualification of the outer vessel USXR and LITER diagnostics were reviewed. The review included:

1. Requirements of shutter operations and updated disruption loads for qualification
2. Shutter material change from stainless steel to Inconel 625
3. Cost and Schedule (updated Work Packages)
4. Calculation report on in-vessel shutters
5. Qualification of USXR and LITER for NSTX-U

This review generated 4 minor chits.

Disposition: [check one]

- ☐ **Acceptable**
- ☒ **Acceptable pending resolution of concerns-** CHITS identified above must be resolved prior to installation.
- ☐ **Incomplete** - Additional design work is required prior to another design review.
- ☐ **Unsuccessful** – Corrective actions must be taken and another review process must be initiated.

Design Review Chair:

Date:

Cognizant Individual Acceptance

Date:

Distribution: Review Board Members, Operations Center, Responsible Engineer (RE), Cognizant Individuals, Project Manager, Project Director, relevant Technical Authorities (TAs), Chief Engineer (CE), Fire Protection Engineer, Attendees, QA, ES&H, Security, Requesting & Performing Dept. Head

Revised 9/12/19