Review of LBNF Bus and LCW modifications to the Main Injector to accommodate the new LBNF extraction line

Charge and Review committee membership

Review to be held on December, 13, 2022

The LBNF beamline is expected to operate for 20 years and deliver beam to the target with a beam power of 1.2MW and allow for future power increases (2.4MW). The Main Injector will be modified to accommodate a new beam transfer line. These modifications will include the relocation of the Bus and LCW.

We are asking the review committee to review the status of the plan and design of the buss and LCW modifications need to accommodate LBNF operation and answer the following questions:

- 1. Is the specification complete and does the design meet the LBNF and MI requirements?
- 2. Is the design consistent with a preliminary design, 50% to 70% with 100% being ready for procurement?
- 3. Have appropriate design guidelines been established and applied to the design?
 - a. Engineering Manual Standards
 - b. Relevant FESHM chapters and National Codes
- 4. Has preliminary engineering analysis preformed and documented? Is there an adequate plan for reviewal and approval of this analysis?
- 5. Have potential design, calculations, manufacturing, and installation risks been identified?

6. Is the cost and schedule understood at the preliminary level, 50% to 70%? Are the estimates creditable and adequately documented?

Finally, the committee should present answers to the above questions and present findings, comments, and recommendations at a closeout meeting. A written report will be provided within two weeks after the review.

Committee Members:

Marty Murphy (chair, AD/MI)

Dan Darimont (AD/EE)

Adam Taylor (ISD)

Eric Barbere (AD/EE)