

Date: May 9, 2019

To: John Hogan

Re: Proton Power Upgrade (PPU) Cryomodule Final Design Review

I am pleased to invite you to travel to Jefferson Laboratory to review the final design of the PPU cryomodule. The review will be conducted from June 10-11, 2019. We value your expertise and welcome your input into making this a successful endeavor.

To coordinate travel arrangements, please contact Angie Woody (woodyae@ornl.gov) at (865) 574-8098. Ed Daly will serve as the host at Jefferson laboratory.

As a product of the review, we request that the review committee produce a final report detailing the findings, comments, and recommendations. We would like to receive the report within 1 week of the conclusion of the review.

In following the charge, the committee should respond to the following questions:

1. Is the baseline design of the PPU cryomodule sufficiently mature to meet the standard for a Final Design, >90% complete, and support readiness for CD-3B?
2. Have recommendations from previous reviews been addressed?
3. Does the baseline design support the project KPPs?

Proton beam power capability	2.8	MW
Proton beam kinetic energy	1.3	GeV
Beam pulse length	1	Ms
Pulse repetition rate	60	Hz
Average linac macropulse current	32-38	mA
Additional cavities/cryomodules	28/7	
Cavity accelerating gradient	16	MV/m

4. Are the drawings and design documentation complete and available?
5. Have SCL PPU risks been properly identified and are mitigation plans adequate?
6. Are there unresolved issues that may have significant safety, quality, cost, schedule or performance impacts?

I thank you for giving your time and expertise in support of this important project.

Sincerely,

Matt Howell
PPU SCL Systems Manager