

**DOE/SC CD-2/3 OPA Review of the
Proton Power Upgrade (PPU) Project at ORNL
July 14-17, 2020**

Tuesday, July 14, 2020 – via Teams (All times listed are in PDT, EDT, and CEST (EU))

PDT	EDT	CEST	Topic	Presenter
6:00 AM	9:00 AM	3:00 PM	Full Committee Executive Session	Ethan Merrill
6:40 AM	9:40 AM	3:40 PM	ORNL Welcome	Thomas Zacharia
6:50 AM	9:50 AM	3:50 PM	Jefferson Lab Perspective	Stuart Henderson
7:00 AM	10:00 AM	4:00 PM	NScD Welcome	Paul Langan
7:00 AM	10:10 AM	4:10 PM	Overview, Issues, Assessment (A1)	John Galambos
7:40 AM	10:40 AM	4:40 PM	Project Management (A2)	Mark Champion
8:05 AM	11:05 AM	5:05 PM	Break	
8:20 AM	11:20 AM	5:20 PM	Cost and Schedule (A3)	Wayne Steffey
8:45 AM	11:45 AM	5:45 PM	Technical Highlights (A4)	Sang-Ho Kim
9:10 AM	12:10 PM	6:10 PM	Superconducting Linac (A5)	Matt Howell
9:35 AM	12:35 PM	6:35 PM	Radio-Frequency Systems (A6)	John Moss
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal Break	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST (EU))

PDT	EDT	CEST	Topic	Presenter
6:00 AM	9:00 AM	3:00 PM	Ring Systems (A7)	Nick Evans
6:25 AM	9:25 AM	3:25 PM	Conventional Facilities (A8)	Mark Connell
6:50 AM	9:50 AM	3:50 PM	First Target Station (A9)	Bernie Riemer
7:15 AM	10:15 AM	4:15 PM	ESH&Q (A10)	Sam McKenzie
7:40 AM	10:40 AM	4:40 PM	Break	
7:55 AM	10:55 AM	4:55 PM	Subcommittee Breakout Sessions	
7:55 AM	10:55 AM	4:55 PM	Session B1—Superconducting Linac	SC1
7:55 AM	10:55 AM	4:55 PM	Session B2—Target Systems	SC2
7:55 AM	10:55 AM	4:55 PM	Session B3—Radio-Frequency Systems	SC3
7:55 AM	10:55 AM	4:55 PM	Session B4—Ring-Accelerator Systems	SC4
7:55 AM	10:55 AM	4:55 PM	Session B5—Conventional Facilities	SC5
7:55 AM	10:55 AM	4:55 PM	Session B6—ESH&Q (Joint with B8)	SC6
7:55 AM	10:55 AM	4:55 PM	Session B7—Cost & Schedule (with B8)	SC7

7:55 AM	10:55 AM	4:55 PM	Session B8— Project Management	SC8
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Breakout Sessions / Working Session	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session / Dry Run	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

Sub-committees

SC1 – Superconducting RF

SC4 – Ring-Accelerator Systems

SC7 – Cost and Schedule

SC2 – Target

SC5 – Conventional Facilities

SC8 – Project Management

SC3 – RF

SC6 – Env., Safety & Health

BREAKOUT AGENDA – SESSION B1
SC1 Superconducting Linac (Convener: Matt Howell)

Wednesday July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B1-1 Superconducting Linac Overview	Matt Howell
8:15 AM	11:15 AM	5:15 PM	B1-2 Cavities	John Mammosser
8:45 AM	11:45 AM	5:45 PM	B1-3 Cryomodule Design and Fabrication	Ed Daly
9:05 AM	12:05 AM	6:05 PM	Break	All
9:15 AM	12:15 PM	6:15 PM	B1-4 Cryogenics	Brian Degraff
9:35 AM	12:35 PM	6:35 PM	B1-5 Utility Systems	Chris Stone
9:50 AM	12:50 PM	6:50 PM	Discussions with subcommittee	All
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B1-6 System Integration	Jeff Saunders
6:25 AM	9:25 AM	3:25 PM	B1-7 Controls	Karen White
6:50 AM	9:50 AM	3:50 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B2
SC2 Target Systems (Convener: Bernie Riemer)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B2-1 2 MW Target	Drew Winder
8:20 AM	11:20 AM	5:20 PM	B2-2 Target R&D	Charlotte Barbier
8:45 AM	11:45 AM	5:45 PM	B2-3 Mercury Process Systems	Craig Bradley
9:10 AM	12:10 PM	6:10 PM	B2-4 Target Utility Systems	Erica Ahlschwede
9:35 AM	12:35 PM	6:35 PM	B2-5 Mercury Off-Gas Treatment System	Greg Stephens
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B2-6 Neutronics	Franz Gallmeier
6:25 AM	9:25 AM	3:25 PM	B2-7 Moderator Cryogenic Systems	Matt Williamson
6:50 AM	9:50 AM	3:50 PM	B2-8 Vessel, Shielding & Instrument Systems	Oscar Martinez
7:15 AM	10:15 AM	4:15 PM	B2-9 Target Safety, Controls, and Operations	Charlotte Barbier
7:40 AM	10:40 AM	4:40 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B3
SC3 Radio-Frequency Systems (Convener: John Moss)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B3-1 RF Systems Overview	John Moss
8:10 AM	11:10 AM	5:10 PM	B3-2 High Power RF System	John Moss
8:35 AM	11:35 AM	5:35 PM	B3-3 Low-Level RF System	Mark Crofford
9:00 AM	12:00 PM	6:00 PM	B3-4 New and existing Linac Modulators	David Anderson
9:25 AM	12:25 PM	6:25 PM	Discussions with subcommittee	All
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B3-5 Utilities	Greg Norman
6:25 AM	9:25 AM	3:25 PM	B3-6 RF Controls and Global Controls	Doug Curry
6:50 AM	9:50 AM	3:50 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B4
SC4 Ring-Accelerator (Convener: Nick Evans)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B4-1 Ring Overview / Accelerator Physics	Nick Evans
8:20 AM	11:20 AM	5:20 PM	B4-2 Injection and Extraction Regions	Robert Saethre
9:05 AM	12:05 PM	6:05 PM	B4-3 Injection Dump Imaging System and Power Rating	Melissa Harvey
9:30 AM	12:30 PM	6:30 PM	Discussions with subcommittee	All
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B4-4 Utilities	Craig Smith
6:25 AM	9:25 AM	3:25 PM	B4-5 Ring Control Systems	Kelly Mahoney
6:50 AM	9:50 AM	3:50 PM	B4-6 Beam Power Limiting System	Craig Deibele
7:20 AM	10:20 AM	4:20 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B5
SC5 Conventional Facilities (Convener: Mark Connell)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B5-1 Klystron Gallery Design and Construction	Mark Connell
8:20 AM	11:20 AM	5:20 PM	B5-2 Contractor Oversight / Safety and Health	Jim Goodpasture
8:45 AM	11:45 AM	5:45 PM	B5-3 Construction Methodology / BIM Integration	Mark Connell
9:05 AM	12:05 PM	6:05 PM	Discussions with subcommittee	All
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B5-4 Klystron Gallery Installation Plans	John Kristy
6:25 AM	9:25 AM	3:25 PM	B5-5 RTBT Stub Design and Construction Plans	Robert Dean
6:50 AM	9:50 AM	3:50 PM	B5-6 Controls	Derrick Williams
7:15 AM	10:15 AM	4:15 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B6
SC6 Environmental, Safety and Health/Quality Assurance
(Convener: Sam McKenzie)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	Meeting jointly with SC8, Project Management	See SC8
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B7

SC7 Cost and Schedule (Convener: Wayne Steffey)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	Meeting jointly with SC8, Project Management	See SC8
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All

BREAKOUT AGENDA – SESSION B8
SC8 Project Management, ES&H/QA, Cost and Schedule
(Convener: John Galambos)

Wednesday, July 15, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
7:55 AM	10:55 AM	4:55 PM	B8-1 Introduction / Project Management	John Galambos
8:20 AM	11:20 AM	5:20 PM	B8-2 Cost and Schedule Discussion	Wayne Steffey
8:45 AM	11:45 AM	5:45 PM	B8-3 QA Update	Bryan Robertson
9:10 AM	12:10 PM	6:10 PM	Break (B6 and B7 break away at this point if desired)	All
9:20 AM	12:20 PM	6:20 PM	B8-4 Procurement	Markus Camfield
9:45 AM	12:45 PM	6:45 PM	Discussions with subcommittee	All
10:00 AM	1:00 PM	7:00 PM	Lunch/Meal	All
11:00 AM	2:00 PM	8:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Thursday, July 16, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Description	Presenter
6:00 AM	9:00 AM	3:00 PM	B8-5 NScD approach to the COVID-19 pandemic	Ann Weaver
6:25 AM	9:25 AM	3:25 PM	B8-6 Jefferson Lab Project Management	Ed Daly
6:50 AM	9:50 AM	3:50 PM	B8-7 Project Management / Installation Plans	Mark Champion
7:15 AM	10:15 AM	4:15 PM	B8-8 Transition to Operations	Glen Johns
7:40 AM	10:40 AM	4:40 PM	Discussions with subcommittee	All
9:00 AM	12:00 PM	6:00 PM	Lunch/Meal	All
10:00 AM	1:00 PM	7:00 PM	Full Committee Executive Session	All
12:00 PM	3:00 PM	9:00 PM	Adjourn	All

Friday July 17, 2020 – via Teams (All times listed are in PDT, EDT, and CEST)

PDT	EDT	CEST	Topic	
6:00 AM	9:00 AM	3:00 PM	Subcommittee Working Session	All
7:00 AM	10:00 AM	4:00 PM	Full Committee Executive Session / Dry Run	All
9:00 AM	12:00 PM	6:00 PM	Closeout Presentation	All
10:00 PM	1:00 PM	7:00 PM	Adjourn	All