

Credited Engineered Controls System Engineer Training

Thomas Copinger

Senior Accelerator Facility Safety Engineer

Internal Readiness Review

April 18-19, 2024



ORNL is managed by UT-Battelle LLC for the US Department of Energy



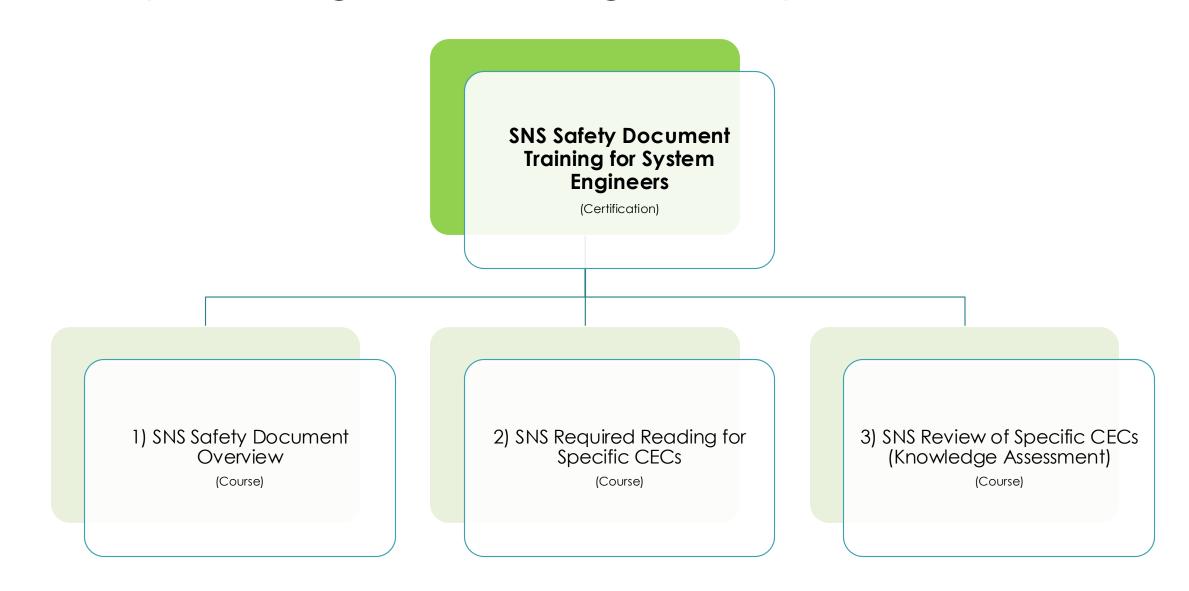
CEC System Engineers

- Every Credited Engineered Control (CEC) in the ASE has an assigned system engineer
 - List that aligns with ASE Rev 7 is documented in 102030100-ES0009-R11
 - List also documents System Engineer responsibilities

#	Location	Credited Engineered Control	System Engineer
1	Neutron Facilities	Target Protection System	Kelly Mahoney
2	Proton Facilities and Neutron Facilities	Personnel Protection System	Kelly Mahoney
3	Proton Facilities	Oxygen Deficiency Hazard Systems	Kelly Mahoney
4	Proton Facilities	Emergency Ventilation System	Kelly Mahoney
5	Neutron Facilities	Service Bay Differential Pressure Monitoring System	Kelly Mahoney
6	Neutron Facilities	Transfer Bay Access Control System	Kelly Mahoney
7	Neutron Facilities	Fire Suppression System Inside the Service Bay	Patrick Thornton
8	Neutron Facilities	Target Building Fire Suppression System Outside the Service Bay	Patrick Thornton
9	Neutron Facilities	Cryogenic Moderator System Hydrogen Boundary	Doug Armitage
10	Neutron Facilities	Cryogenic Moderator System Vacuum Boundary	Doug Armitage
11	Neutron Facilities	Service Bay and Core Vessel 2-Hour Equivalent Fire Barrier – Isolation Function	Richard Collins
12	Neutron Facilities	Service Bay and Core Vessel 2-Hour Equivalent Fire Barrier – Fire Barrier Function	Patrick Thornton
13	Neutron Facilities Confinement Function of Core Vessel and Neutron Beam Windows		Ryan Schultz
14	Neutron Facilities	Service Bay and Monolith Confinement of Mercury	Ryan Schultz
15	Neutron Facilities	Primary Confinement Exhaust System	Greg Stephens
16	Neutron Facilities	High Bay Floor Design	Richard Collins
17	Neutron Facilities	Mercury Heat Exchanger Double-Wall Design	Drew Winder
18	Neutron Facilities	Mercury Pump Tank Exhaust Line Loop Seal	Drew Winder
19	Neutron Facilities	Mercury Pump Tank Rupture Disk and Discharge Path	Drew Winder
20	Neutron Facilities	Mercury Pump Tank Exhaust Line Loop Seal and Orifice	Drew Winder
21	Neutron Facilities	High Bay Crane Design	Richard Collins
22	Proton Facilities	Central Helium Liquification Compressor Room Passive Ventilation Features	Thomas Neustadt
23	Neutron Facilities	Cryogenic Moderator System Catalytic Converter Retention Elements	Brian DeGraff



CEC System Engineer Training Concept





All Training Complete

- All CEC System Engineers affected by FSAD-PF Rev 3/ASE Rev 6 and FSAD-NF Rev 4.1/ASE Rev 7 have been retrained
- SNS Radiation Safety Officer (RSO) has also been retrained

Name	Curriculum IDs	Curriculum	Date Completed
Kelly Mahoney	5214, 5215	CECs 3, 4	9/30/2022
Thomas Neustadt	5233	CEC 22	9/30/2022
Richard Collins	5222, 5227, 5232	CECs 11, 16, 21	2/26/2024
Greg Stephens	5226	CEC 15	2/26/2024
Doug Armitage	5220, 5221	CECs 9, 10	2/23/2024
Kelly Mahoney	5212, 5213, 5216, 5217	CECs 1, 2, 5, 6	2/21/2024
Patrick Thornton	5218, 5219, 5223	CECs 7, 8, 12	2/27/2024
Ryan Schultz	5224, 5225	CECs 13, 14	3/1/2024
Drew Winder	5228, 5229, 5230, 5231	CECs 17, 18, 19, 20	3/1/2024
Brian DeGraff	5234	CEC 23	2/29/2024
Christi Elam	2635	RSO	2/29/2024

