



**SANFORD
UNDERGROUND
RESEARCH
FACILITY**

SURF Electrical Infrastructure

Theia Site Visit
December 1, 2025

SURF Electrical and Standby Power

Current SDSTA + LBNF	Total Capacity	Available Capacity
Electrical Power [kW]	24,000	20,000
Standby Power [kW]	390	80

Future (FY27) SDSTA + LBNF	Total Capacity	Available Capacity
Electrical Power [kW]	24,000	15,000

- LBNF/DUNE Operations = 5-6 MW**
(4 detectors)
- Nitrogen generators ~3 MW
 - Chillers/cooling ~1.6 MW
 - Detector power ~1.4 MW

