

Seismic Event Preparedness



Control Center and Mutual Assistance

- Redundant operational systems and facilities between Portland and Salt Lake City:
 - Two control centers – Fully redundant Emergency Management System
 - Redundant outage management system
 - Two customer contact centers – Ability to do customer service transactions at both locations



- Mutual Assistance Agreements
 - Adjacent utilities
 - Berkshire Hathaway Energy cross-platform agreements
 - National agreements



Mitigation and 2020 Earthquake

- Mitigation – Pre-Event Preparation:
 - Ongoing asset replacement and upgrade programs
 - Add capacity and redundancy to the system
 - Perform targeted hardening of facilities
 - Substation seismic design standards
 - Equipment – Institute of Electrical and Electronic Engineers (IEEE) Standard 693
 - Structures – Company Policy 273, American Society of Civil Engineers (ASCE) 7 & 113
 - Control Buildings – International Building Code (IBC)
 - Employee preparation/emergency drills
- Mitigation – Post-Event Response:
 - Spare equipment evaluation
 - Mutual assistance agreements
 - Business continuity plans
- 2020 Magna Earthquake
 - 75,000 customers and 250 megawatts of load was lost because of the earthquake
 - Restoration response and repair was underway within an hour and all but a handful of single customer outages were restored by 10:30 p.m.
 - Control Center and Customer Contact Center transferred operational management to Portland facilities during the event