

Portland General Electric 121 SW Salmon Street · Portland, Ore. 97204

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Via Electronic Filing puc.filingcenter@state.or.us

Public Utility Commission of Oregon Attn: Filing Center 201 High St., SE. Suite 100 P. O. Box 1088 Salem, Oregon 97308-1088

## RE: PGE UE-319 2020 Prospective Research & Development Projects

Enclosed pursuant to OPUC Commission Order 17-511 (UE-319), is Portland General Electric Company's list of prospective Research and Development Projects for 2020.

Should you have any questions or require further information please call me at (503) 464-7002.

All formal correspondence should be e-mailed to pge.opuc.filings@pgn.com.

Sincerely,

Jay Tinker Director, Regulatory Policy & Affairs

Enclosure JT/lh

cc: Tyler C. Pepple, AWEC Bob Jenks, CUB

<b>UE-319 Reporting Requirement</b>	
PGE's 2020 Prospective R&D Projects	

Analysis of EV Charging impact to Power Quality and Loss-of-Life of Service Transformers

Cascadia Lifelines Project

Construction Safety Research Alliance (CSRA)

Customer Flexible Load Resource at Scale

EPRI Combustion Dynamics Training for Online Gas Turbine Assessment

EPRI Community Smart Pole

EPRI Energy Sustainability Interest Group

EPRI Fire Prevention and Mitigation

EPRI Next Generation Smart Meter Vision and Criteria

EPRI P1 Power Quality

EPRI P161 Information and Communication Technology

EPRI P174 Integration of Distributed Energy Resources

EPRI P18 Electric Transportation\*

**EPRI** P180 Distribution Systems

EPRI P183 Cyber Security

EPRI P193B Wind Generation Annual Research Program

EPRI P198 Strategic Sustainability Science

EPRI P200 Distribution Operations and Planning

EPRI P60 EMF and RF Health Assessment and Safety

EPRI P62 Occupational Safety and Health

EPRI P64 Boiler and Steam Turbine Cycle

**EPRI P79** – Combined Cycle Turbomachinery

EPRI P88: HSRG and BOP

EPRI P94 Energy Storage and Distributed Generation

EPRI Research and Testing of Alternatives to SF6

HD Charging Infrastructure O&M Strategy and Training

Hydrogen Electrolyzer Feasibility Study

Implementation of CVR in the Test Bed

Integrated Campus Facility and Climate Action Planning (PSU)

Investigating Thermal Energy Storage for Flexible Load and DR Potential in Oregon (OIT)

Investigating Use of Ductile Iron Poles for T&D Infrastructure (OSU)

Investigation on Transient and Steady State Behavior of Microgrids Before, During and After Islanding in Terms of Frequency and Voltage (OIT)

Low Grade Heat Recovery from Carty Plant through Thermochemical Energy Storage (OSU)

NEEA End Use Load Research

OIT Energy Storage-2nd Life Battery

On-Line Boiler Integrity Risk Assessment

OSU MGrid Synchrophasor

Planning for Grid Impacts of High Powered EV Charging (PSU)

Port Westward Iron Transport Evaluation

## UE-319 Reporting Requirement PGE's 2020 Prospective R&D Projects

Repowering Strategies of the Biglow Canyon Wind Plant (PSU)

Shared Circuits to Increase EV Adoption and Limit Residential Transformer Impacts

Sherwood Training Center Energy Storage Demo Project

Smart PDX Air Sensors Partnership

Solar PV Monitoring Data - U of O

Stacked Services from Aggregated Distributed Energy Resources (PSU)

Thermal Plant Drone Applications

WSU Power Engineering Energy Innovation Center Data Access