

2022 Annual Western Interregional Coordination

March 4, 2022



#### Purpose:

NorthernGrid is the outcome of a single transmission planning region, facilitating regional transmission planning, enabling one common set of data and assumptions, identifying regional transmission projects through a single stakeholder forum, and eliminating duplicative administrative processes.



Planning Member Footprint: 14 Western Regional Members









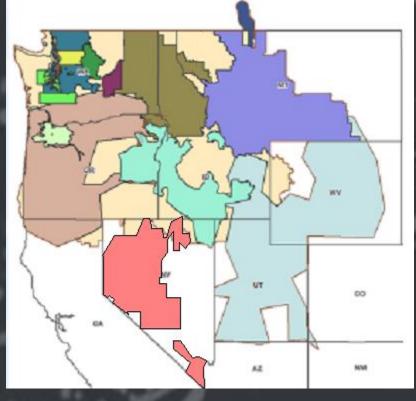




















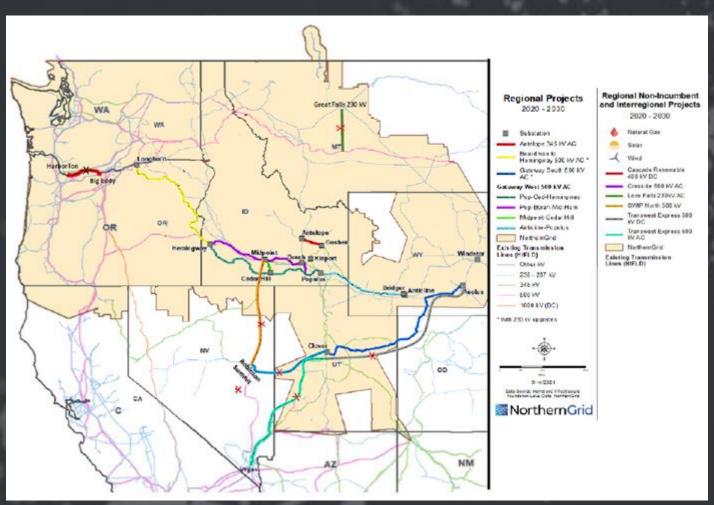


### **NorthernGrid**

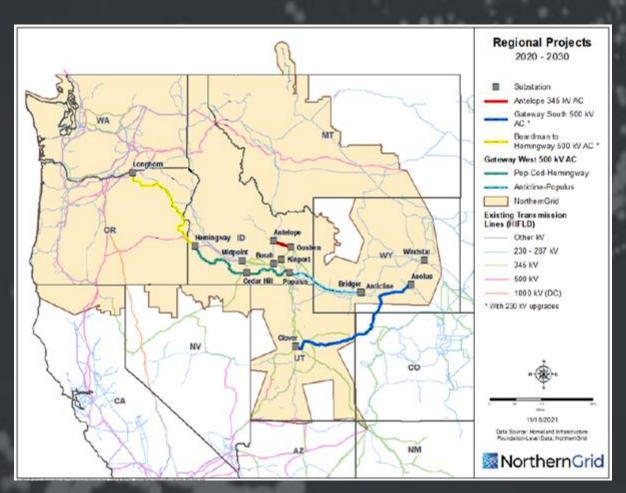
## Summary from Previous 2020-21 Planning Cycle

- Production Cost Model used to generate scenarios
- Members reviewed scenarios and selected hour snapshots of interest
- 8 Seasonal baseline powerflow case developed
- 22 Regional Combinations Evaluated
- ~1200 Regional Contingencies Run

# NorthernGrid All Projects Evaluated



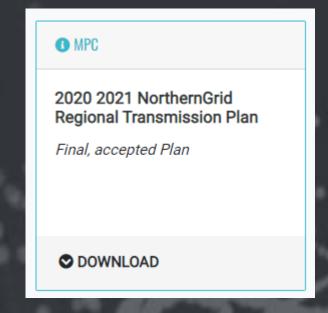
# Regional Projects Selected into the 2020-21 Regional Transmission Plan

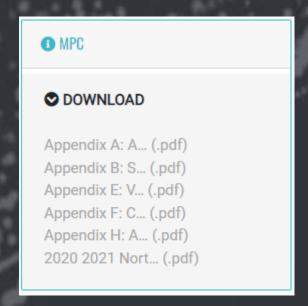


## Northern Grid Final 2020-21 Regional

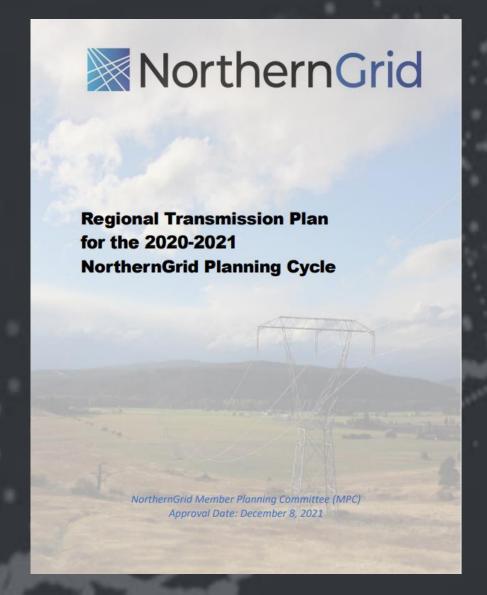
Transmission Plan:

Approved by MPC on 12/8/2021 Notification provided to members on 12/13/2021 Report Posted to NorthernGrid website









<u>Link to</u>
<u>Regional</u>
<u>Transmission</u>
Plan

# A new year a new assessment cycle...

 What is changing around NorthernGrid?

• What changes is NorthernGrid making?

### **NorthernGrid**

### General changes at NorthernGrid:

- NWPP now is Western Power Pool
- Technical analysis to be moved in-house
- New member welcome NV Energy!
- Some interregional projects are now regional projects
- New MC and MPC co-chairs welcome Mike Magruder (MC) and Rikin Shah (MPC)
- DOE study outreach

# Next Steps after 2020-21 cycle:

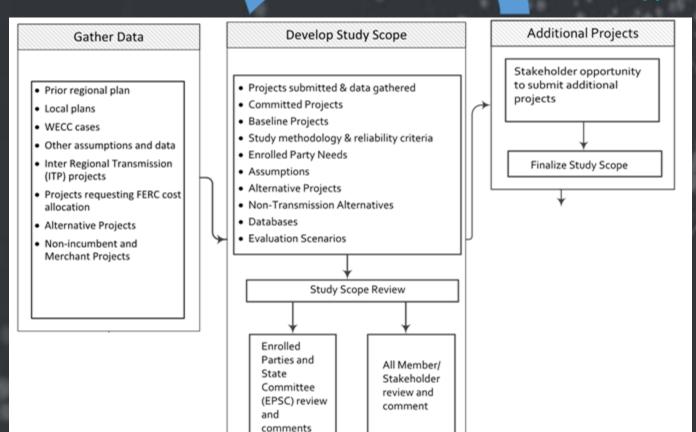
Debrief / Lessons Learned - solicit stakeholder input

- Review of study scope development process
- Increased coordination with Enrolled Parties and States Committee to develop the study scope
- Request for improved interface between interregional needs
- Outreach to other resources performing related assessments (WECC, Department of Commerce)
- Desire for other case type options (WECC base case)
- PCM / Round Trip opportunities coordinated with WECC

## Study Scope Drafting

Team

**Study Scope Drafting Team (SSDT)** Invites more stakeholder comments up-front in the study scope process. MPC still approves study scope





## Study Scope Drafting Team Discussion

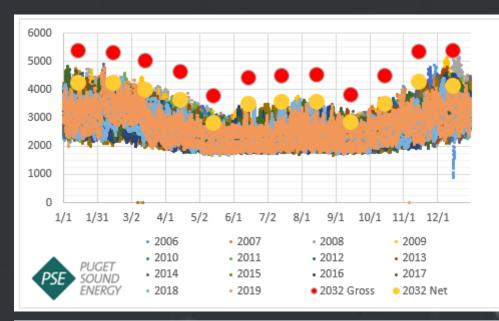
- Significant state policy changes with potential for significant regional changes (an understatement!)
- Electrification, EVs, Conservation, Demand Side Management
- Differences between IRP, L&R, and WECC base case data sets
- Appropriate data sets for primary analysis versus sensitivity
- Seasonal / system conditions to assess
- Tool use and appropriateness for data conclusions
- Potential for economic study options

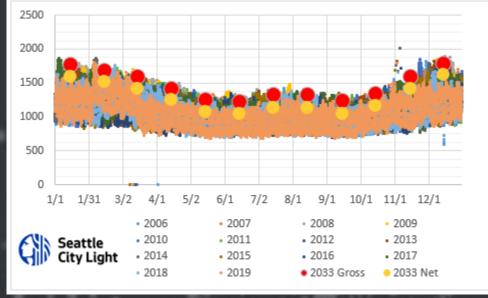


### Member Data Submittal Window:

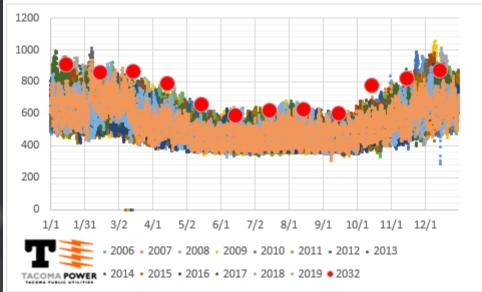
- The NorthernGrid member data submittal window closed February 22, 2022
- Deadline for Developer project submittals is March 31
- Data submittals are being being review for completeness.
- Discussion of L&R submittal versus IRP contents
- Conservation and DSM a key factor

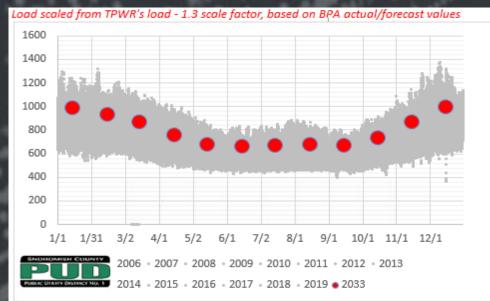
### Member Load Submittals - Puget Sound region





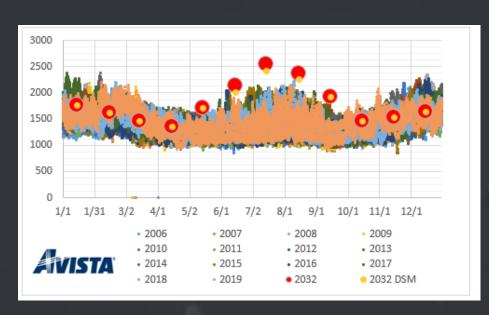
Historic loads from FERC 714 reporting

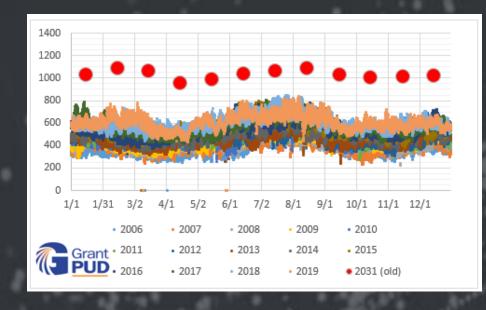




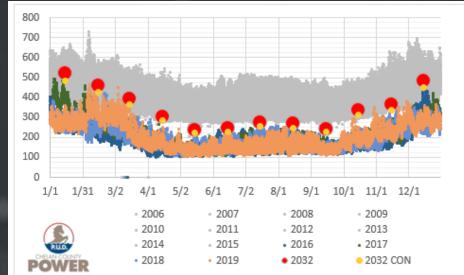
SNPD not a BA so doesn't have FERC 714 hourly reporting — TPWR shape used and scaled to approximate SNPD load profile

## Member Load Submittals - Eastern WA / North ID Utilities

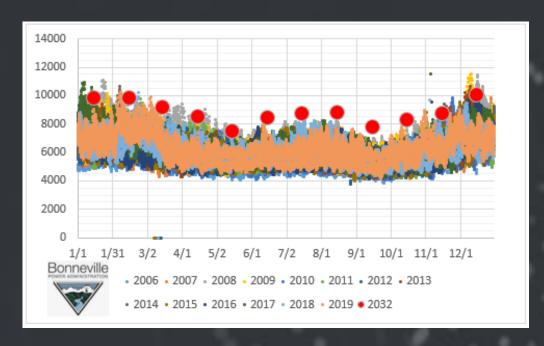


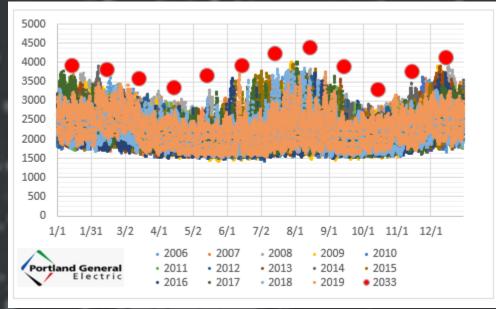


Historic loads from FERC 714 reporting



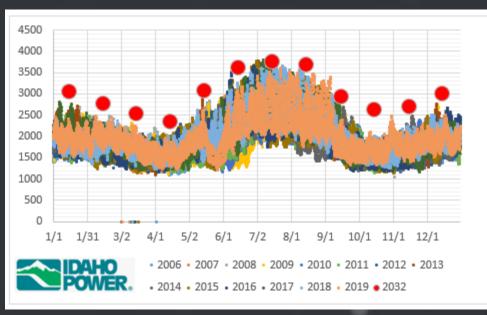
### Member Load Submittals - BPA, PGE

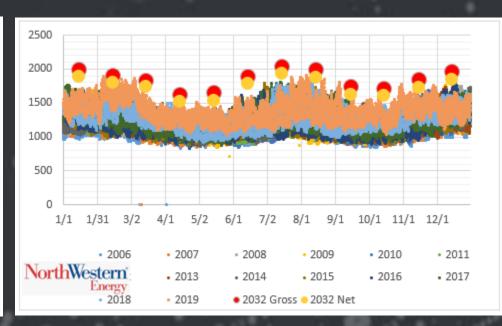




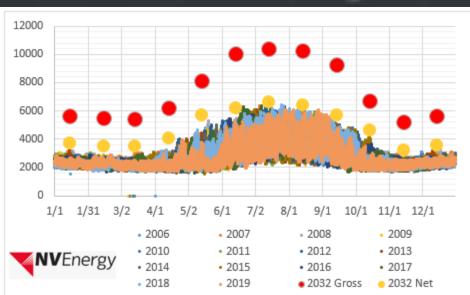
Historic loads from FERC 714 reporting

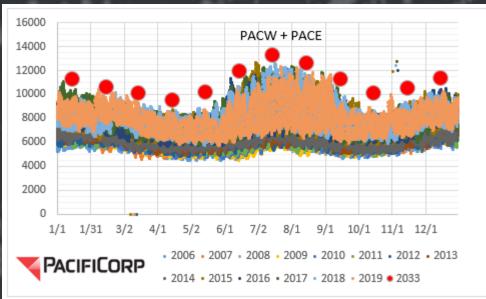
### Basin region





Historic loads from FERC 714 reporting





PACW and PACE combined



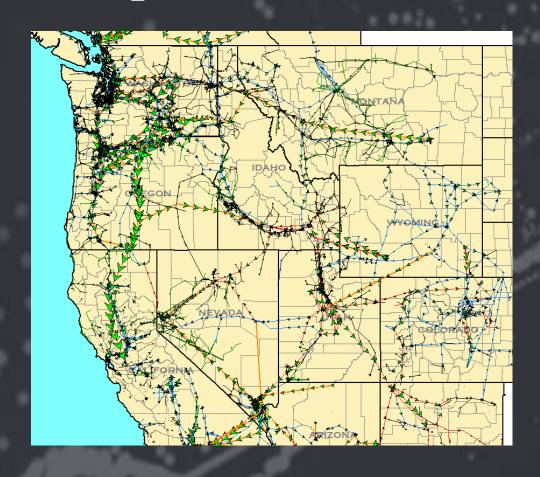
### Resource Changes:

- Conversation regarding IRP level needs, L&R acceptable reporting, and WECC base case level modeling.
- With new resources, capacity factor needs create potential for oversupply.
- PCM dispatch challenges for zero cost resources
- Additional challenges for treatment of battery and other storage

	Generation	Αc	ld	Retire
	AVA		2226	0
	BHE	0		0
	BPA		524	0
	CHPD		0	0
	Grant		0	0
	IPC		388	775
	NVE		3491	1237
	NWMT		343	0
	PACE/W		9401	6434
	PGE		18.9	0
	PSE		0	370
	SCL		0	0
	SNPD		0	0
	TPWR		0	0
	Total		16392	8816



### Any Questions?





# THANK YOU!