

**EXH. PKW-29
DOCKETS UE-22 ___/UG-22 ___
2022 PSE GENERAL RATE CASE
WITNESS: PAUL K. WETHERBEE**

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-22 ___
Docket UG-22 ___**

**TWENTY-EIGHTH EXHIBIT (NONCONFIDENTIAL) TO THE
PREFILED DIRECT TESTIMONY OF**

PAUL K. WETHERBEE

ON BEHALF OF PUGET SOUND ENERGY

JANUARY 31, 2022

Mid-C Transmission Contract Renewals

EMC Informational

August 26, 2021



Tom Flynn

Manager Energy Delivery

Recommendation

- Renew 400 MW BPA Mid-C transmission contracts for 5 year term.
- Overview:
 - Current contracts end 10/31/2022.
 - Renewal rate starts at \$23.57/kW – Yr, PSE assumes a 3% annual escalation rate.
 - Contract is renewed indefinitely.
 - Provides a \$301M present value benefit over a cost of a peaker.
 - Alternate resource is a natural gas peaker.
 - This is a Mid-C resource-specific transmission contract.
 - Mid-C transmission in excess of PSE’s Mid-C generation capacity relies on the market to supply the energy.



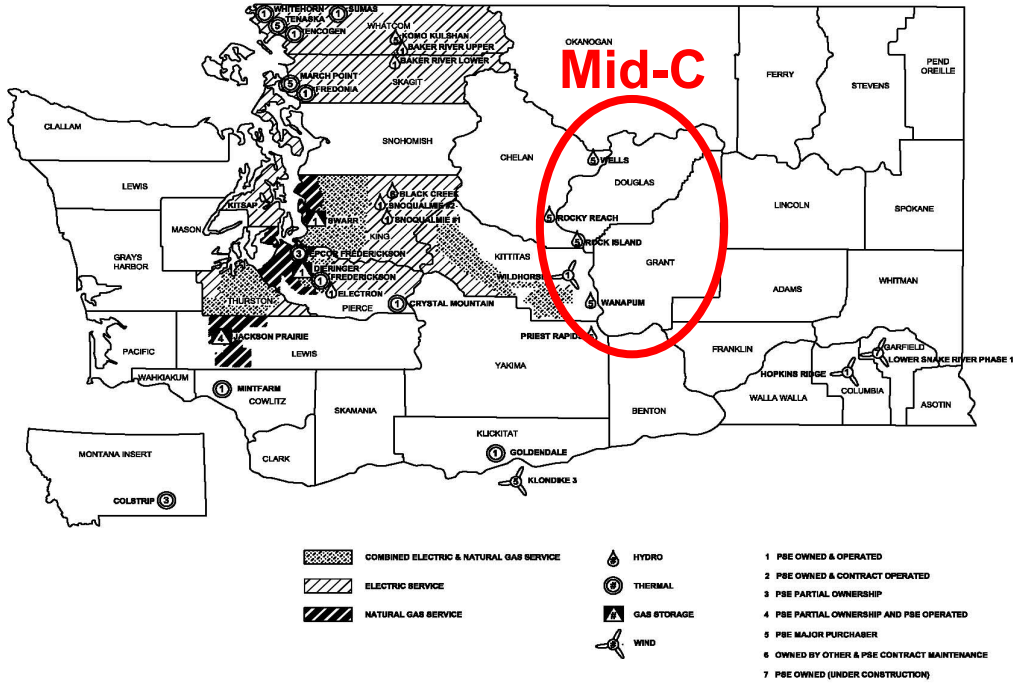
Background

- 2011 WUTC GRC Final Order: PSE is expected to provide for any renewal or acquisition of firm transmission “a full and detailed justification showing the prudence of this expense if the Company expects to continue to recover it in rates.”
- BPA transmission contracts are renewed at least one year prior to termination date to exercise the reservation priority rights thereby avoiding competition with other parties in the queue
- BPA transmission contracts are generally renewed for the minimum term of 5 years to retain renewal rights and allow flexibility to reevaluate transmission need

CONTRACTS FOR RENEWAL:			
Project	Start	Term	MW
Midway(MidC)	11/1/2017	10/31/2022	100
Rocky Reach (MidC)	11/1/2017	10/31/2022	100
Rocky Reach (MidC)	11/1/2017	10/31/2022	100
Vantage (MidC)	11/1/2017	10/31/2022	100
Total			400



Remote Resource Map- Mid-C Resources



Key Considerations

- Current information from BPA suggests PSE's ability to obtain Mid-C transmission in the future is very limited and uncertain.
- If we forego the opportunity now, it will be difficult to obtain future transmission capacity.
- Analysis of BPA Long-Term Pending Queue indicates lack of future capacity on Cross Cascades North Flowgate.
- Mid-C transmission increases PSE's exposure to market reliance.
 - 2021 RFP is requesting resource proposals to firm up 1000 MW of Mid-C transmission to mitigate market reliance risk.
 - Market reliance risk is also mitigated if used for a new renewable resource, redirects, or resales.

CETA Contribution

- 2021 IRP identified transmission needs to meet CETA renewable resource delivery. These 400 MW contracts will help meet PSE’s forecasted need for future transmission.
- 2021 IRP also identified future capacity needs and acquiring Mid-C transmission is cheaper option to building an equivalent natural gas peaker plant(+\$301M)

CETA Need (in GWhs)*	2022	2023	2024	2025	2026	2027	2028	2029	2030
CETA qualifying resources	7,398	9,045	9,087	8,963	9,016	8,824	8,707	8,660	8,691
2021 IRP Draft CETA Energy Target - Mid with Conservation	7,398	8,345	9,297	10,059	10,958	11,717	12,618	13,423	14,061
CETA Need/(Surplus)	0	(699)	210	1,096	1,942	2,892	3,912	4,763	5,369
Need /(Surplus) after 50MW Tx purchase									

* Updated Draft 2021 IRP



Recommendation

- EMC approves the renewal of the 400 MW BPA Mid-C Transmission contracts for 5 year term.

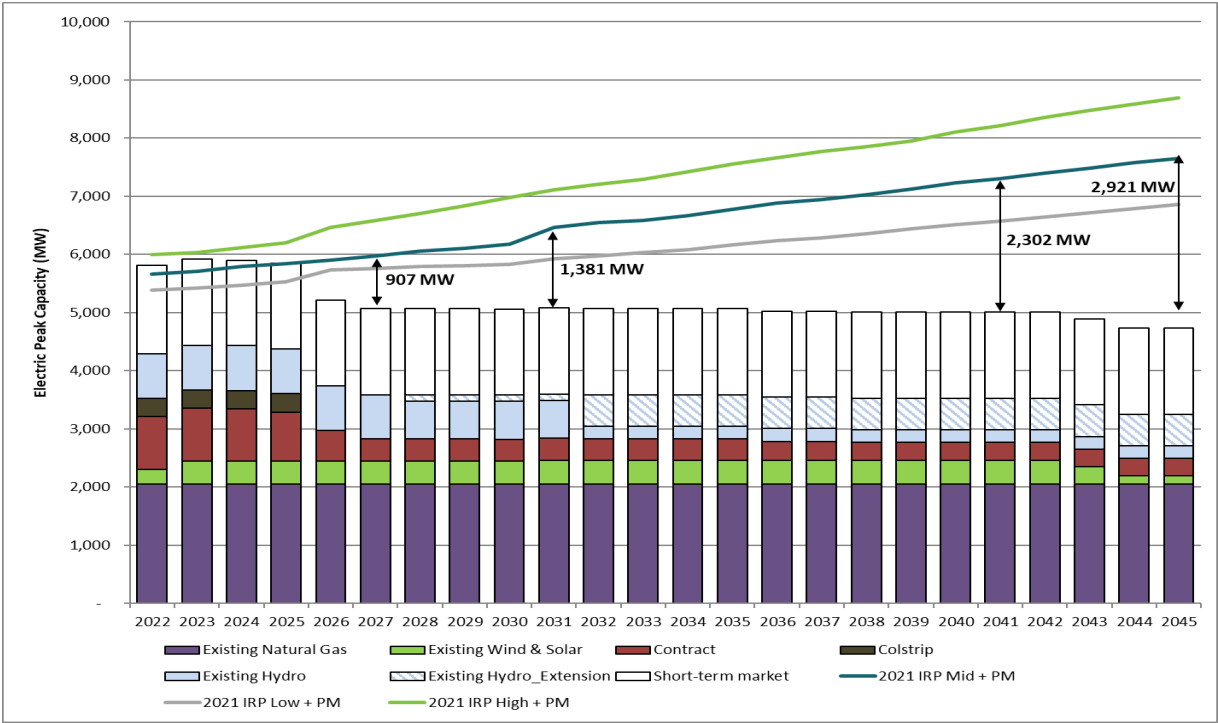
Appendix: BPA Long Term Queue Analysis

- Pending queue data was pulled on July 14, 2021 and is publicly available on bpa.gov/transmission
- Queue analysis indicates that if PSE does not purchase, next requesters in the queue could reserve capacity into perpetuity
- Should PSE place new request in queue, it would enter the bottom of the queue, behind all other requests
- Upcoming BPA transmission model changes and no-build policy could affect PSE's ability to purchase long-term transmission in future

Future Outlook of Cross Cascades North Flowgate

	2022	2023	2024	2025	2026	2027	2028	2029	2030
Remaining ATC (MW)	816	807	694	685	676	681	672	663	653
Less Pending Queued Requests (MW)	(249)	(1094)	(1937)	(2221)	(2948)	(3174)	(3183)	(3198)	(3208)

Appendix: Electric Peak Capacity Need (2021)



Appendix: Cost Comparison

Base Case: Transmission ELCC = 100%			
	Transmission Renewal - 30 Year	Frame Peaker	Battery
Nameplate Capacity MW	400	400	2,104
Time Frame - Years	30	30	30
Peak Capacity Contribution MW	400	400	400
NPV Cost (\$000)	\$153,362	\$454,932	\$2,282,541
Peak Capacity Cost \$/kW-yr	\$32.12	\$95.27 *	\$478.00
* per 2021IRP Avoided cost for baseload capacity			