STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION
1300 S. Evergreen Park Dr. S.W., P.O. Box 47250 ● Olympia, Washington 98504-7250
(360) 664-1160 ● www.utc.wa.gov

June 22, 2017

Steven V. King, Executive Director and Secretary
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Dr. SW
P. O. Box 47250
Olympia, Washington 98504-7250

RE: UE-121373 - *In the Matter of the Petition of PUGET SOUND ENERGY, For Approval of a Power Purchase Agreement for Acquisition of Coal Transition Power, as Defined in RCW 80.80.010, and the Recovery of Related Acquisition Costs.*

Dear Mr. King:

In Order 03 of the above referenced docket, the Commission required Puget Sound Energy (PSE or company) to monitor, and report annually, TransAlta's production levels at the Centralia Coal Transition Facility (CCTF). This is PSE's third annual compliance report since the company began taking deliveries of power under the Coal Transition Power Purchase Agreement (PPA) with TransAlta in December 2014.

Background

Included as part of PSE's annual compliance report is the amount and source of resupply power[1] TransAlta used to satisfy its delivery obligations under the PPA when the CCTF was not generating power. The Commission's rationale for such reporting was that it is conceivable that deliveries of resupply power could reach a point where the PPA may be determined to no longer qualify under the terms of RCW 80.04.570.[2]

[1] The term, "resupply power", refers to deliveries of power under the PPA from sources other than the CCTF.
[2] Order 03 at ¶ 68 states:

"We need not at this juncture determine definitively the full legal consequences that might flow from these circumstances, if they eventuate. It is better to take a conservative and practical approach than to establish a bright line beyond which the volume of resupply power means the contract between PSE and TransAlta will lose its character as a coal transition power purchase agreement. It is for this reason that we issued Bench Request No. 2, to which PSE responded on December 28, 2012. The confidential information PSE provided in its response shows the Historical Generation of the CTCF in GWhs on a quarterly basis from the 1st Quarter of 2008 through the 4th Quarter of 2012, as of the time of the response. These data show that TransAlta's operations of the CTCF are consistently at a level, in all quarters of the year, that would result in all power delivered under the Coal Transition PPA being from the facility. Over the five years reported, had the Coal Transition PPA been in effect, only 10 percent of the deliveries to PSE would have been considered resupply power."

Figure 1 below compares the CCTF's total generation with the amount and source of power provided by TransAlta to meet its contractual obligation under the terms of the PPA. The MWh volume increases under the terms of the PPA are shown for both December 2015 and December 2016.

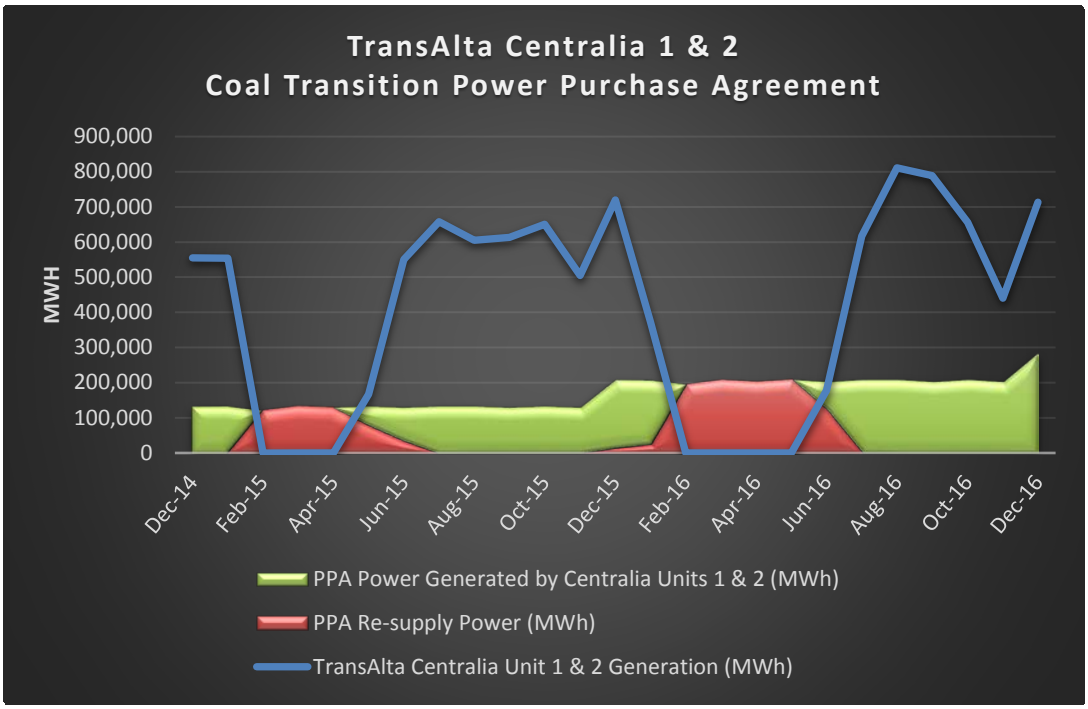

Figure 1 TransAlta Centralia Generation

PSE is also required to report on TransAlta's "contributions of financial assistance" made pursuant to Section 3 of the Memorandum of Agreement (MOA) between TransAlta and the State of Washington. Under the MOA, each year, three payments are made which sum to $4,530,000.[3] PSE reports that TransAlta has made all of the payments required under the MOA for 2016.

TransAlta also reports annually the average number of full-time equivalent employees (FTEs) employed at the CCTF which has fallen from 232 FTEs in 2014 to 207 in 2016.

Staff Analysis of PSE's 2016 Annual Compliance Filing; Coal Transition PPA

CCTF Emissions of CO_2

For this compliance reporting year, Staff includes CO_2 emissions data[4] for the CCTF. Emissions data is not provided by PSE or TransAlta as part of the PPA compliance reporting requirement ordered by the commission. As expected, emissions from the CCTF are trending downward as a result of less generation from the plant. At full production (over 90 percent capacity factor and no resupply power) the CCTF's CO_2 emissions would be approximately double the 5.6 million tons emitted in 2016.

[3] The three separate annual payments are: $833,333 to the Weatherization Fund; $1,666,667 to the Economic and Community Development Fund; and $2,083,000 to the Energy Technology Fund. Payments under the MOA began in 2012 and are scheduled until 2023.
[4] S&P Global Market Intelligence LLC, SNL.

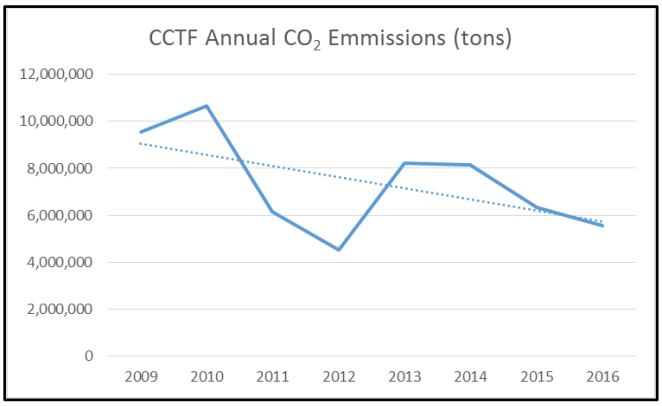

Figure 2; CCTF CO_2 Emissions

Resupply Power

When taking into account total generation for 2016, the CCTF is operating at about a third of its total capacity. The CCTF's capacity factor has been steadily declining since 2013 when it stood at 57.2 percent.

CCTF Capacity Factor			
2013	**2014**	**2015**	**2016**
57.2%	56.9%	42.8%	39.0%

Resupply as a percentage of total power delivered under the PPA has increased. Column c in Table 1 below shows that for 2015 resupply power totaled 515,489 MWh or 31.2 percent of the 1.7 million MWh delivered in that year. In 2016, resupply power reached almost 1.0 million MWh or 38.1 percent of the total 2.5 million MWh for that year. Resupply power amounts were almost entirely delivered between the months of February and June when market prices at the MidC trading hub are lower due to hydro generation. The annual compliance report provided by TransAlta also identifies the source of resupply power.[5] Over 90 percent of resupply power was generated from hydro resources.

Staff does not have access to the actual costs and terms by which TransAlta acquired resupply power on the market. Instead, Staff compared PPA prices against average spot market prices for power at the MidC trading hub. Spot prices reflect the cost of energy only and do not include capacity costs or other charges which may be incurred to deliver power to a point of receipt on PSE's system. Therefore, the differential between spot and PPA prices, when applied to resupply volumes, is intended to provide an order of magnitude estimate of the additional margins stemming from TransAlta buying power instead of generating itself at the CCTF. For 2016, this differential was about $32.0 million. In 2015, this amount was about half of the 2016 number or $15.5 million. The increase in the differential in 2016 was the result of both lower market prices at MidC (compared to 2015) and the volume and price escalations in the PPA.

Coal Transition PPA Power Cost Baseline Impacts

Expressed in terms of PSE's power cost baseline rate, the PPA has the following impacts:

Yr.	Power Cost Baseline Rate	PPA Impact to Baseline Rate	Percent
2015	$59.819	$3.742	6.3%
2016	$59.819	$5.873	9.8%
2017	$58.144	$7.906	13.6%

Table 2; Coal Transition PPA Impacts to Power Cost Baseline

As can be seen from Table 2 above, the PPA in its current form constitutes a significant and increasing portion of the power cost baseline rate. Declining market prices for gas and power have helped mitigate the PPA's impacts to the power cost baseline.

[5] The compliance report from PSE provides the North American Electric Reliability Corporation (NERC) e-Tags for the sources of resupply power.

Table 1; 2016 Coal Transition PPA

a	b	c	d	e= c+d	f	g = e*f	h	i= (c*(f-h))
Month	TransAlta Centralia Unit 1 & 2 Generation (MWh)	PPA Re-supply Power (MWh)	PPA Power Generated by Centralia Units 1 & 2 (MWh)	Total Power Deliveries to PSE by TransAlta (MWh)	PPA Price ($/MWh)	Total Contract Deliveries @ PPA prices	MidC Spot Market Price ($/MWh)	Resupply Power @ Difference of PPA & MidC Spot Price ($/MWh)
Dec-14	554,742	0	133,020	133,020	$47.66	$6,339,733	$28.12	$0
Jan-15	554,454	0	133,920	133,920	$47.66	$6,382,627	$21.39	$0
Feb-15	68	120,959	0	120,959	$47.66	$5,764,906	$13.26	$4,161,191
Mar-15	0	133,739	0	133,739	$47.66	$6,374,001	$16.72	$4,137,315
Apr-15	0	129,560	0	129,560	$47.66	$6,174,830	$13.06	$4,482,448
May-15	166,959	79,927	53,971	133,898	$47.66	$6,381,579	$26.03	$1,728,627
Jun-15	550,606	35,975	93,600	129,575	$47.66	$6,175,545	$31.71	$573,892
Jul-15	657,969	0	133,920	133,920	$47.66	$6,382,627	$30.80	$0
Aug-15	605,176	0	133,920	133,920	$47.66	$6,382,627	$27.53	$0
Sep-15	612,886	0	129,600	129,600	$47.66	$6,176,736	$27.49	$0
Oct-15	650,671	0	133,920	133,920	$47.66	$6,382,627	$22.75	$0
Nov-15	505,152	0	129,780	129,780	$47.66	$6,185,315	$19.50	$0
Dec-15	719,736	15,329	192,991	208,320	$48.81	$10,168,985	$19.82	$444,415
Jan-16	372,134	26,369	179,746	206,115	$48.81	$10,061,349	$22.96	$681,751
Feb-16	0	194,879	0	194,879	$48.81	$9,512,872	$17.08	$6,184,339
Mar-16	0	207,665	0	207,665	$48.81	$10,137,011	$13.25	$7,385,450
Apr-16	0	201,600	0	201,600	$48.81	$9,840,953	$12.53	$7,314,905
May-16	0	208,303	0	208,303	$48.81	$10,168,155	$14.66	$7,114,433
Jun-16	178,020	121,926	79,674	201,600	$48.81	$9,840,953	$22.12	$3,254,723
Jul-16	616,784	1,400	206,920	208,320	$48.81	$10,168,985	$30.44	$25,724
Aug-16	811,096	0	208,320	208,320	$48.81	$10,168,985	$35.49	$0
Sep-16	789,020	0	201,600	201,600	$48.81	$9,840,953	$28.39	$0
Oct-16	655,933	0	208,320	208,320	$48.81	$10,168,099	$23.16	$0
Nov-16	440,097	0	201,880	201,880	$48.81	$9,853,763	$19.28	$0
Dec-16	713,751	375	282,345	282,720	$50.00	$14,136,000	$34.25	$5,906

Conclusion

For 2016, PSE has complied fully with the reporting requirements contained in Order 3. Staff also concludes that the PPA between PSE and TransAlta continues to meet the legislative policy goals for coal transition power.

> "Therefore, it is the purpose of this act to provide for the reduction of greenhouse gas emissions from large coal-fired baseload electric power generation facilities, to effect an orderly transition to cleaner fuels in a manner that ensures reliability of the state's electrical grid, to ensure appropriate cleanup and site restoration upon decommissioning of any of these facilities in the state, and to provide assistance to host communities planning for new economic development and mitigating the economic impacts of the closure of these facilities."

Resupply, in conjunction with lower market prices for power, appear to have allowed TransAlta to economically operate the CCTF at lower capacity thereby reducing emissions from the plant while still meeting its financial obligations to the community.