

BEFORE THE STATE OF WASHINGTON UTILITIES AND TRANSPORTATION  
COMMISSION

In the Matter of the Application of	) DOCKET UE-200115
	)
PUGET SOUND ENERGY	)
	) PETITION FOR INTERLOCUTORY
For an Order Authorizing the Sale of All of	) REVIEW OF DENIAL OF
Puget Sound Energy’s Interests in Colstrip	) LATE FILED PETITION TO
Unit 4 and Certain of Puget Sound Energy’s	) INTERVENE OF JEFF P. JORDAN
Interests in the Colstrip Transmission	)
System.	)
	)

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1. **Background** On September 10, 2020, the Washington Utilities and Transportation Commission ("Commission") issued DOCKET UE-200115 ORDER 04, SECOND PREHEARING CONFERENCE ORDER DENYING LATE-FILED PETITIONS TO INTERVENE (“Order 4) in which the Commission denied the Late-Filed Petition to Intervene in this docket of Jeff P. Jordan (“Jordan”).

2. Jordan hereby petitions the Commission for Interlocutory Review of the Commission’s denial in Order 4 of Jordan’s Late Filed Petition to Intervene pursuant to Washington Administrative Code ("WAC") 480-07-355(5).

3. Jordan offers the following arguments with respect to the reasons given for denial of his Late Filed Petition to Intervene in the Commission’s Order 4 in this docket.

**4. Jordan Interests Are within Scope and Not Adequately Represented.** In order to “...demonstrate that those interests he identifies that are within the scope of this proceeding

(and) are not adequately represented by any other party”, Jordan offers the following brief summary interests/points of his position, which he will then use both to demonstrate both key points of disagreement with the other public-interest parties and other issues.

- A) 5000 MW of coal generation in the NW Power Pool is retiring by 2025.
- B) Northwest wind and solar cannot be used to replace retiring winter baseload coal generation.
- C) Prudence suggests planning now for 3000 to 4000 MW of new natural gas generation to be fully on-line by November of 2025 to operate primarily in winter months as needed.
- D) 7000 MW (nameplate) of Eastern Montana Wind could replace 3000 MW of winter baseload coal generation. This would require 7000 MW of transmission capacity.
- E) The existing Colstrip Transmission System (CTS) and continuing BPA segments, converted to high-voltage, direct-current transmission (HVDC), could offer 7000 MW of transmission capacity in Phase I and 7000 MW of firm clean power in Phase II.
- F) The existing CTS requires a specialized large generator to start-up and stabilize the operation of the power lines, particularly when co-transmitting with variable output wind.
- G) Only Colstrip 4 will be operating after 2023, so if Colstrip 4 goes down, the CTS goes down and cannot transmit wind power or anything else.
- H) Colstrip 4 has a significant boiler problem, so may not last until 2025, let alone 2027.
- I) HVDC can start up with wind power and can be used to stabilize the connected AC grid, so would provide eliminate CTS dependence on Colstrip 4.

**5. Jordan Interests Are Not Adequately Represented by Any Other Party.** “RNW, NVEC, Sierra Club, Public Counsel, and Staff” are the other parties mentioned in Order 4. Jordan copied RNW in his initial HVDC letter to the Pacific NW Power Planning and Conservation Council (PNWPPC), but RNW did not respond to his connection request. NVEC agreed to look at Jordan’s subsequent summary but cautioned that it would not be taking a position unless they thought it a specific interest of their membership. The Sierra Club specifically declined to support Jordan’s HVDC position in Docket UE -191023. Jordan independently responded to a specific Staff question in his Comments in that docket but believes that Staff will require the direction of the Commission to take him seriously. Public Counsel did not return Jordan’s call. Order 4 notes that other than PSE, no party commented on Jordan’s Petition. Jordan has been given reason to believe, as noted above, that no other public-interest party in this Docket is comfortable with items B and C above and none of them is likely to advocate for B and C in this Docket. Jordan is offering a unique and timely advocacy in the public interest.

**6. Broadening the Scope of the Proceeding.** From Order 4 “We decline to broaden the scope of this proceeding, which is limited to the Commission’s evaluation of whether granting the Application, as supplemented, and approving the proposed transactions is consistent with the public interest.” Jordan is only seeking to broaden the scope of this proceeding sufficiently to determine the value of the CTS in this transaction based on its highest and best use, which Jordan argues is consistent with the public interest. The basis of this valuation argument is outlined in A through I in paragraph 2 above, and additional details are available in Jordan’s August 18, 2020 Comments to Staff in Docket UE-191023. The Commission has already included in this proceeding “... the interests of Washington ratepayers outside of PSE’s service territory,” which is noted in paragraph 14 of the Commission’s Prehearing Conference Order 02 in this Docket:

14 Avista and PacifiCorp, in addition to being co-owners, are also electric companies serving Washington customers. Their participation in this proceeding will aid the Commission in determining whether the Proposed Transactions are in the public interest by providing perspective related to the ways in which the Proposed Transactions may affect the interests of Washington ratepayers outside of PSE's service territory.

Jordan's proposed "participation in this proceeding will aid the Commission in determining whether the Proposed Transactions are in the public interest by providing perspective related to the ways in which the Proposed Transactions may affect the interests of Washington ratepayers outside of PSE's service territory." His participation goes directly to preventing a winter-power-capacity-shortage event similar to California's current problem and to the NW Power Pool market events of 2001, so is in the interests of Washington ratepayers both outside and inside of PSE's service territory.

**7. Response to PSE's RESPONSE IN OPPOSITION TO THE LATE-FILED PETITION TO INTERVENE OF JEFF P. JORDAN ....**

17 In addition, the Petition fails to explain how Mr. Jordan's participation would be in the public interest. Indeed, the predominant theme of the Petition is that Mr. Jordan seeks to use the proceeding to argue for the conversion of the conversion of the Colstrip Transmission System into a High Voltage Direct Current (HVDC) transmission line in a complex and grand scheme to deliver North Plains Wind to the Grand Coulee Dam that appears to involve both the Colstrip Transmission System and the Eastern Intertie and main transmission system of BPA ...

Only in the United States could this be called “a complex and grand scheme”. Brazil and Argentina share an HVDC system more advanced than any in North America. China has a 12,000 MW HVDC clean power line that runs 2100 miles and has 1250-foot high towers to span the Yangtze River. Colstrip to Grand Coulee is not even 700 miles, less than the 785-mile, 50-year-old Pacific DC Intertie from The Dalles, Oregon to Los Angeles, California. Jordan thinks of this scheme as using existing right-of-way, towers, and conductors to quickly create an HVDC line, which is the only alternative to building 4000 MW of natural gas capacity to replace retiring wintertime coal capacity in order to avoid a 2001-like capacity shortage in the NW Power Pool. The only good thing about being 20 years behind in clean power technology is that the United States can just copy the technology leaders, like China, who have already done the “complex and grand” parts, of which PSE appears to be unaware or uninterested. Portland General Electric and Pacific Gas and Electric have each studied HVDC lines through Washington State to reach the Northern Plains wind in Alberta, Canada, more complex and grander schemes, which show they are attempting to incorporate state-of-the-art technology in their clean energy plans. Jordan’s testimony will include peer-reviewed technical papers, which demonstrate that converting existing powerlines to HVDC is very often much simpler, faster, and less costly than any other option for increasing transmission capacity. Jordan will use these papers to show that HVDC conversion options are actually less complex or grand than any other option for increasing clean power transmission capacity, more so because everybody wants more clean power, but no one wants new powerlines.

**8. Response to Paragraph 18 of PSE’s RESPONSE IN OPPOSITION TO THE LATE-FILED PETITION TO INTERVENE OF JEFF P. JORDAN:**

*18.* Moreover, even if Mr. Jordan were to make a compelling argument for the

conversion of the Colstrip Transmission system as part of a plan to access North Plains Wind, this is not the proper forum for that discussion. The Petition itself states that the plan would require the conversion of both the Colstrip Transmission System and both the Eastern Intertie and portions of the main transmission system of BPA. PSE is but one of five co-owners<sup>16</sup> with an undivided interest in the transmission system and can take no unilateral action with respect to any potential conversion of the line, and the Commission has no jurisdiction over two of the co-owners (NorthWestern Energy and Portland General Electric Company). Additionally, the Commission has no jurisdiction over the Eastern Intertie and portions of the main transmission system of BPA. The transmission assets owned and operated by BPA are subject to myriad and complex federal statutes and regulations, each of which is clearly not within the jurisdiction of the Commission or affected by the Proposed Transactions.

Jordan is aware that the legal, regulatory and political aspects of this scheme are far more difficult and complicated than are the technology, engineering, financing, construction, and operation aspects, but he believes a Grand Bargain may be possible because each and every one of the parties could come out a winner. Jordan will argue that the probability of achieving such a Grand Bargain is highest when utilities regulated by the Commission are required to retain their CTS holdings in the public interest. Whatever the Commission decides in this Docket will be seen as a precedent, so the public interest value of this particular proposed sale is partly the principle that Washington-regulated utilities will preserve their CTS holdings to optimize the probability of a Grand Bargain in the public interest.

**9. Explanation of Jordan’s Not Filing a Timely Petition to Intervene in the Public Interest.**

**A.** Due to the nature of this petition, as revealed above, and particularly, to the rapidly developing environment in which the public interest is evolving, satisfactory explanations could be based on several reasons, including events occurring before or after the filing deadline that are essential to logical conclusions justifying intervention, the time required to do research motivated by such events, the time required to reach and test conclusions based on the above, and other reasons of necessity for filing a cogent petition to intervene in the public interest. A satisfactory explanation of why a person did not timely file such a petition to intervene might therefore reasonably be based partly on one or more events that occurred before the deadline for filing a petition to intervene.

**B.** Jordan offers the following information format as a satisfactory explanation adapted in the “what did he know and when did he know it” structure commonly submitted to the Commission. Jordan offers this information not as logical argument but only as evidence of his state-of-mind related to the justification for filing a late-filed petition to intervene in the public interest at successive points in time. The numbers included here are not fully justified as they would be in testimony but are evidence of what Jordan knew, or at least believed, at successive points in time.

**C.** In January of 2020, Jordan was pursuing multiple avenues of inquiry to explore possible problems in advancing the Clean Energy Transition Act and possible solutions thereto. For example, raw clean energy requires two to four times more transmission capacity than coal or gas plants. One solution is to incorporate batteries at the point of generation, so the energy can be delivered 24-hours a day to achieve 2-4x more energy transferred per day over the available

transmission capacity. Another solution is to convert the transmission to HVDC, which increases the thermal-transmission-capacity limit by 3.5 times. The ultimate theoretical solution is to combine batteries at the point of generation, HVDC transmission, and wind or solar nameplate capacity 2-3 times the HVDC power transmission capacity, which allows 7 to 10 times more clean energy/day over the same powerline right of way and answers the “Everybody wants clean energy, but no one wants new powerlines” problem.

**D.** In April, Jordan still thought the ultimate solution would have to wait years for appropriate battery technology, but on May 5, 2020, FORM Energy and Minnesota’s Three Rivers Energy announced a 1,000 MW wind-energy/battery/HVDC (ultimate-solution) project at Underwood, North Dakota, only 275 miles from Colstrip MT, so both are in the Northern Plains Wind and incorporate HVDC transmission. The revolutionary FORM Energy battery technology will reportedly provide 150 hours at 1,000 MW to get Three Rivers Energy through polar vortex events, wherein Northern Plains temperatures plummet and wind stops for several days. This wind/battery solution is replacing the current coal generation that already travels on an HVDC line from Underwood, North Dakota to the Minneapolis, Minnesota area. Jordan accepted this as a hard data point, because 1) the agreements had reportedly been signed, 2) this project is underway and features Tesla’s former Chief of Battery Development, the MIT development environment, and Bill Gates investment. As a result of further research, Jordan came to believe that the CTS conversion to HVDC from Colstrip to Grand Coulee could eventually be a 7x scale-up of the ongoing Underwood ND project and could be dispatched by BPA as 7,000 MW of firm clean power capacity similar to a hydroelectric system, so could eventually provide 3,000 MW of winter baseload capacity to displace natural gas plants. During this time ABB, the world leader in HVDC, acquired GE’s Industrial Electric Division, the only HVDC-capable group in the US,



and subsequently formed a joint venture with Hitachi, world leader in power system controls, called Hitachi ABB Power Grids. This JV is extremely qualified and well located for supporting the development and operation of CTS HVDC, which will be plain and simple to them.

**E.** In the January to August 2020 period, Jordan was also listening in on Sierra Club Zoom meetings, which covered a bewildering array of topics and actions, and occasionally offering his thoughts and technical references related to the essential role of transmission in utilizing clean power. Over the months Jordan became more familiar with regulatory issues but discovered that his conclusions were somewhat different than the Sierra Club's, particularly his conclusion that Montana wind and HVDC conversion of the CTS are essential to achieving CETA goals. When the Commission consolidated DOCKETS UE-190698 and UE-191023 in UE-191023 on August 13, 2020, Jordan felt confident enough to post his "Response to Question 1 of WUTC's August 13, 2020 NOTICE OF OPPORTUNITY TO FILE WRITTEN COMMENTS" on August 18, 2020.

**F. Filing Sequence:** The August 18, 2020 (above-referenced) comments were Jordan's first communication with the Commission and establish the time he first believed 1) he was basically qualified to participate in the Commission's process 2) the technology was available to make the CTS HVDC project the highest and best use of the CTS for purposes of valuation in this docket, and 3) the public interests he represents would not be adequately represented by any other party in this docket.

On August 20, 2020, PSE filed its

Supplemental Application of Puget Sound Energy for an Order  
Authorizing the Sale of All of Puget Sound Energy's Interests in Colstrip  
Unit 4 and Certain of Puget Sound Energy's Interests in the Colstrip  
Transmission System.

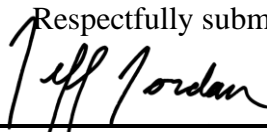
On September 4, 2020 Jordan filed his Late Filed Petition to Intervene in this docket.

### CONCLUSION

For the foregoing reasons, Jeff P. Jordan respectfully seeks Interlocutory Review of the  
Commission's denial in Order 4 of Jordan's Late Filed Petition to Intervene of September 4,  
2020.

Dated this 18th day of September 2020.

Respectfully submitted,



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Jeff P. Jordan