BEFORE THE STATE OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the 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.	) DOCKET UE-200115))) LATE-FILED PETITION TO) INTERVENE OF JEFF P. JORDAN)))))

INTRODUCTION AND IDENTITY OF PETITIONER

l. Pursuant to Washington Administrative Code ("WAC") 480-07-355 of the Procedural Rules of the Washington Utilities and Transportation Commission ("Commission"), Revised Code of Washington ("RCW") 34.05.443, Order 01 and the Notice of Hearing on file in the above-captioned matter, Jeff P Jordan ("Jordan"), 11670 Des Moines Memorial Drive South, Burien WA 98168, Unit A-414, hereby petitions the Commission for permission to intervene with full party status in the above-captioned matter, pursuant to WAC 480-07-340. This Late-Filed Petition to Intervene is made pursuant to WAC § 480-07-355(1)(b) and for good cause, as set forth more fully herein.

2. Jordan is appearing in this matter pro se and will file Notice of Appearance with the Commission pursuant to WAC 480-07-345(2). Jordan appeared pro se on behalf of the Small Power Producers ("SPP") before the Montana PSC ("PSC") in the initial Public Utilities Regulatory Policy Act of 1978 (PURPA) Docket in 1980-1981. Colstrip 4 was the proxy used by the PSC as the "Avoided Cost" basis for developing the rate to be paid by utilities to SPP, which the PSC set at 6.5 cents/kwh. In 1982-1983, Jordan managed the development, construction, and operation of small hydroelectric systems on the municipal water systems in Philipsburg, Montana and in Whitefish, Montana. These were the first SPP generating systems to be put on the transmission systems both of Montana Power, now NorthWestern Energy ("NWE"), and of Pacific Power and Light, now served by Flathead Electric Coop, using the PURPA rates and conditions set by the PSC. Since then, Jordan has been continuously engaged in alternative energy and energy efficiency projects and in related technology and is generally familiar with the pleadings and other documents on file to date and the issues to be considered by the Commission. Before entering the alternative energy arena in 1977, he studied electrical engineering at the University of Colorado, served as an Electronics Maintenance Officer on a US Navy ship in Viet Nam, worked six years in production management and industrial engineering for a Fortune 500 company, and received an MBA from UC Berkeley. Jordan has been granted six US Patents related to alternative energy and energy efficiency and presented five peer reviewed papers at American Society of Naval Engineers Symposiums, most recently at *Technology, Systems and Ships 2019* in Washington DC.

GOOD CAUSE FOR LATE FILING OF PETITION TO INTERVENE

3. Jordan has only recently become aware of the importance of details surrounding the proposed transfer of PSE's interest in the Colstrip Transmission System (CTS) to NorthWest Energy (NWE). In a rapidly changing technical, economic, and regulatory environment, the (CTS) has recently emerged as a critical component for achieving the intent of the Clean Energy Transition Act (CETA.) Earlier this month, the Staff of the Federal Energy Regulatory Commission (FERC) presented testimony to Congress on the critical need for new high-voltage, high-capacity power transmission to deliver Clean Power from remote locations to populated areas of power consumption. On 8/13/2020, the Commission recast its Discussion Draft Rules in UE- 190698 and UE-191023 (now consolidated in UE-191023) and invited comments. On 8/18/20, Jordan filed "191023-Jordan-Comments-on-8-13-20-Notice.pdf", which discusses problems in the replacement of retiring coal power capacity with wind and solar power capacity in the State of Washington. In those comments, Jordan noted the critical importance of the CTS in the transmission of Montana wind to Washington and the critical importance of Montana wind in replacing retiring coal capacity in Washington. The recent California rolling power outages have called attention to similar issues. Recently published peer-reviewed technical papers have detailed practical methods of converting existing high-voltage, alternating-current (HVAC) transmission systems, like the CTS, to high-voltage, direct-current (HVDC) transmission systems. The HVDC conversion commonly allows three

times more power over the same towers and conductors, and also has significant advantages over the existing HVAC in working with variable clean power sources, like wind and solar. HVDC has been used in the Pacific DC Intertie since 1970 and is widely used in new, long-distance power transmission around the world. In the US, everybody wants clean power, but nobody wants new power lines. HVDC conversion of existing lines is uniquely able to meet both requirements. On 8/20/20, PSE filed a "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" and "Prefiled Supplemental Direct Testimony (NONCONFIDENTIAL) of Thomas M. Flynn on behalf of Puget Sound Energy", which discloses and effectively proposes sales of portions of PSE's CTS interest to NWE and to Talen Energy, if Talen Energy should win a pending arbitration. Jordan is requesting intervener status in this Docket for the purpose of opposing such sales as being contrary to the public interest.

INTEREST OF THE PETITIONER IN THE PROCEEDING

4. Petitioner has demonstrated a long and abiding commitment to alternative energy and energy efficiency, has long been a devoted student of the science and methods necessary to advancing these goals, and believes that the resulting accumulation of knowledge and experience will be of particular value in this Docket. On this basis, petitioner seeks to intervene in the public interest on matters related to the potential future of the Colstrip

Transmission System (CTS) in serving the winter wind-energy needs of the State of Washington.

PETITIONER'S POSITION ON MATTERS IN CONTROVERSY

5. Petitioner opposes PSE's transfer of its CTS interest to NWE and Talen Energy and will offer testimony on the substantial value of the CTS to PSE, to the Ratepayers of the State of Washington, and to fulfilling the intent of CETA. Petitioner will take no position on the transfer PSE's Colstrip Capacity interest to NWE and/or Talen Energy, and anticipates no need for access to Confidential Information.

PETITIONER PROPOSAL TO BROADEN THE ISSUES IN THE PROCEEDING

5. Jordan wishes to broaden the consideration of the value of the CTS to the success of CETA and of the value that would be lost in the transfer of PSE's CTS interest to NWE/Talen. Jordan stipulates that all testimony and evidence will be concise and based on peer-reviewed technical papers and on similar transmission systems already in service in the US, Europe, China, and other countries, which demonstrate possible solutions for CETA implementation problems in Washington. Jordan plans to offer a detailed technical version of the argument, which is offered below in simple terms and round numbers.

The Colstrip Transmission System (CTS), converted to High Voltage Direct Current (HVDC) operation, is the only clean-power option for avoiding severe winter power shortages in the NW region in the next few years. Without such conversion, the likely alternative is new natural gas generation, particularly in the case of PSE, which is contrary to the intent of CETA.

Unlike California, NW power shortages are most likely in the months of December through February because:

1. This is the annual peak power demand period of the NW Power Pool Area.
2. 5,000-6,000 MW of NW Coal Power Generation plants are shutting down by the end of 2025, which now serve as winter base-load generation.
3. Both Wind and Solar resources in the NW are lowest in December through February, when demand is highest and prolonged low temperatures likely.

The only clean power resource within reach to answer NW winter power demand is wind in the area the US Energy Information Agency (EIA) calls the "North Plains", including Eastern Alberta, Eastern Montana, and the Dakotas. North Plains wind power provides 3 to 4 times higher capacity factor than NW wind power in the critical November to March period, and is lowest in the summer months, when the NW will probably be increasingly power surplus due to wind and solar power generation. There is no time available to build a new HVDC line to Alberta's North Plains, which might be the best possibility if the NW utilities had another 10 years to work with.

This leaves the CTS HVDC conversion as the only possibility for HVDC access to the North Plains Wind in the next few years. This conversion would include the existing 300-mile CTS and parts of the continuing 500 miles of BPA Transmission. Before this conversion, this combined system now delivers about 750 MW of Colstrip Coal Winter Power to Grand Coulee and about 750 MW to the Lower Snake River Dams distribution points. The preferred form of HVDC conversion would deliver 3,500 to 7,000 MW to Grand Coulee, based on design decisions to be made in the engineering phase. Jordan has offered more details on these matters in his 8/18/20 comments in Docket UE-191023 (noted above). He will also offer evidence that the current CTS will require significant control upgrades for stably carrying wind power and such upgrades may not be economically feasible when both Colstrip 3 and Colstrip 4 are closed, which economic conditions may force before 2025, whereas HVDC is stable from no power to full power.

To preserve these HVDC possibilities, Jordan will urge the Commission to require PSE to retain its interest in the CTS, because such retention will favor the progress of CETA, which is in the public interest.

NAME AND ADDRESS OF PRO SE PETITIONER

6. Jordan consents to service by electronic mail only.

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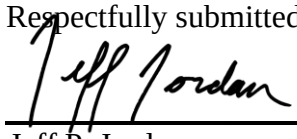
CONCLUSION

For the foregoing reasons, Jeff P. Jordan respectfully seeks leave to intervene and requests that he be granted intervenor status in the above-captioned proceeding.

Dated this 9th day of September 2020.

Respectfully submitted,



Jeff P. Jordan