OF OREGON

PCN-2

In the Matter of the Petition of)
TILLAMOOK PEOPLE'S UTILITY DISTRICT)
PETITION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY)))
)

INTERVENOR REPLY TESTIMONY OF DORIS MAST

March 12, 2019

Doris Mast – Intervenor Reply Testimony

I. Introduction

Pursuant to the Prehearing Conference Memorandum issued by Public Utility Commission of Oregon Administrative Law Judge Patrick Power dated February 5, 2019, Doris Mast submits this Intervenor Reply. Based on the evidence and record in this proceeding, Doris Mast, Intervenor respectfully requests that the Commission deny TPUD's Petition for a Certification of Public Convenience and Necessity to construct an 8.6 mile overhead transmission line from Tillamook to Oceanside.

II. Background

Intervenor testimony has shown that the line is not necessary and in the public interest. Intervenors have given testimony TPUD could achieve its objectives of increasing reliability and ensuring that existing and future customers could be served without a transmission line.¹ Rebuilding feeder 51 would fulfill those objectives at far less cost and no need for eminent domain. Option 3 brings a second source of power to the costal community and would not require eminent domain.²

IV. Argument

Intervenor Doris Mast has presented testimony that it is in the public interest to use less costly options which do not require eminent domain.³ Since the extra capacity from the transmission line is not needed for 38 - 50 years and other options improve reliability no one is harmed if the line is not built⁴. Intervenor Doris Mast does not agree that the necessity, safety, practicability, and justification requirements under ORS 758.015 (2) have been met.

A. Necessity Standard has not been met

Neither the Wilson River substation nor Feeder 51 are operating at full capacity and the necessity standard has not been met. To determine if the Wilson River substation is

¹ Doris Mast/300 p 3, p 9 Doris Mast/200 p 12

² Doris Mast January 10, 2018 p3 Doris Mast/200 p 5

³ Doris Mast 300 p 2, p 3, p 7, p 14 Doris Mast 200 p 4

⁴ Doris Mast 301 Mast/1 Column C Doris Mast 305 Mast/1 Column B

operating at full capacity, I consulted David Mast's graph called "Wilson 1, Wilson 2 Nameplate Capacity vs Annual Coincident Peak and Average Load 2007 – 2017." The highest coincident peak at the Wilson River substation is 70% of the new nameplate capacity of 90 MWs while the average load is 33%. Using a method for determining future loads based on TPUD's method in the Load Forecast of 2007 and the Load Forecast of 2012, Wilson River substation will not reach the maximum capacity of 90 MWs in this century.⁶ Even with the present conductors some of which are 50 years old, feeder 51 only has a max loading of 73.75%. TPUD plans on using conductors able to return 15 MWs on feeder 51 from Oceanside to Tillamook.8 TPUD has further stated that the distribution line and the transmission line "both use the same wires". 9 After feeder 51 is rebuilt with the proper conductors it will be able to serve both present and future loads. 10 Even with the current 50 year old conductors, feeder 51 is only at 73.75% max loading and the Wilson River substations highest coincident peak was at 70% of the new nameplate capacity, therefore TPUD has not demonstrated that the Wilson River substations are operating at full capacity nor that Oregonians will forgo something desirable and useful without the transmission line because load growth can be supported by the current capacity at the Wilson River substations and feeder 51 can serve present and future loads for the coastal communities. TPUD's assertion that without the transmission line Oregonians living in or visiting Netarts and Oceanside communities will forgo reliable electric service is wrong. Intervenors have given testimony that Option 3 or rebuilding feeder 51 could provide coastal communities with reliable electric service. 11

The TPUD board has not passed a resolution or ordinance of need for the purpose of condemnation because the public has openly voiced disapproval of doing so. The commission should consider the intervenor arguments on the necessity, safety, practicability and justification in the public interest for the proposed transmission line rather than giving deference to the TPUD board members, one of whom openly expressed the hope that intervenors would be tarred and feathered and run out of Tillamook County because the intervenors had the audacity to contact the Tillamook County Creamery Association and the Farm Bureau to request public hearings on Option

⁵ David Mast/300 p 6

⁶ Doris Mast/301 Mast/1 Column C

⁷ 2018 TPUD Construction Work Plan p 48

⁸ TPUD/106 Simmons/23

⁹ TPUD Post Hearing Submittal to Tillamook County Planning Commission of March 15, 2018 p 7

¹⁰ Doris Mast/300 p 2

¹¹ Doris Mast testimony, January 10, 2018 p 2, p 3 Doris Mast 200 p 5, p 11, p 12

3 and expressed disapproval of going to the PUC for a CPCN.¹² Intervenors have entered into the record that TPUD denied the right to discuss need during the CAG process.¹³ Intervenors want the Commissioners to undertake a robust and thorough consideration of all arguments regarding necessity, safety, practicability and justification standards.

B. Evaluating need for the transmission line considering the addition of 11.5 MW to the Wilson T 1

TPUD argues that even with the 11.5 MW additional capacity from the larger transformer at Wilson River substation there is a significant need to provide back up capacity from Oceanside to the Wilson and Trask substations. The applicant errs in his statement that the transmission line will address all 4 of the issues identified for the purpose and need of the project. The transmission line only takes power to Oceanside. In order to increase system capacity by returning excess capacity from Oceanside to Tillamook, TPUD must place the power on the segment of feeder 51 that has caused the most outages according to a map furnished to PUC staff as part of DR-31. This part of the project is not practicable nor in the public interest because 10,000 people in the central valley should not be served by a line deemed incapable of serving 1,650 people in Netarts – Oceanside, 40% of whom are on seasonal meters.

Improving the reliability of the service to Oceanside-Netarts depends on having a working substation at each end of the line. ¹⁶ We are led to believe that feeder 51 is so plagued by outages that it cannot be rebuilt and provide reliable service unless there is a substation at each end of the line. If that is correct, and we know that Wilson River is at one end of the line, how does TPUD expect feeder 51 to transfer loads in an N -1 situation from Oceanside substation to the central valley on feeder 51? If a car hits a pole or a tree limb breaks a conductor between the working Oceanside substation and the Wilson River substation which is suffering an outage, power cannot be fed from both sides to correct the issue and the central valley will not get the power it sent to Oceanside. What went to Oceanside stopped on feeder 51. It is **not** a good idea to put the 10,000 people of the central valley with its critical load of the hospital and clinics, large commercial and large industrial at the end of the worst feeder in the system in an N -1. TPUD has shifted the reliability problem from a population of 1,650 people where

¹² David Mast/300 p 14

¹³ David Mast 200 p 4

¹⁴ TPUD's Opening Post-Hearing Brief p 5

¹⁵ David Mast 400 p 3

¹⁶ TPUD/205 Fagen/48

40% of the residents are on seasonal meters to a larger population of 10,000 full time residents with critical load. It is not reasonable to expect the worst feeder in the system to perform reliably in a N -1 outage when we are told it cannot reliably carry 5 – 11 MW's to Oceanside – Netarts. Since the transmission line and substation shift reliability issues from one set of rate payers to another set of ratepayers, the \$16 million cost is not justified and the project is not in the rate payers interest. It is more practicable to find solutions that reduce outages in Oceanside and Netarts without increasing them in the central valley. Either rebuilding feeder 51 or using Option 3 would be sensible with less cost and impact. Neither would require eminent domain as they use existing easements in the road right of way.

Intervenors have testified that the electric loads and peak demands can be met by the current system in the central valley.¹⁷ TPUD has added 3 new substations in the central valley since 1973.¹⁸ Three of the four substations in the central valley have been built since 1973 – Garibaldi (1994), Wilson River 2 (2002) and Trask (1996). Yet the average annual MWs purchased from 1973 to 2016 has only increased approximately 23 MWs.¹⁹ The 3 new substations added 106 MWs. Now an additional 11.5 MWs has been added to Wilson T1 in the central valley. Intervenors have given testimony that the central valley has sufficient capacity. The maximum peak of 2009 for the central valley would use 58% of the current capacity of 151.9 MWs for the central valley and use only 83% of the N-1 capacity of 106.7 MWs. The average load is 37.83 MWs which uses 24.9% of the central valley capacity. This data shows that TPUD is able to provide service to existing and new loads in the central valley.²⁰ Doris Mast has given testimony that feeder 51 can meet present and future loads in the coastal communities. ²¹ The 4 substations in the central valley will not reach the combined capacity of 151.9 MWs until 2165 when longevity is calculated using the same method for selecting the starting load as TPUD did in the load growth forecast of 2007, and 2012 and uses the last TPUD board approved growth of 0.45%.²² Using the same method, the N -1 capacity is reached in 69 years.²³

Since current and future loads of the central valley can be met for over 38 - 50 years without the transmission line, necessity has not been proven and rate payers will benefit if a more practicable and lesser cost option is pursued.²⁴ Since capacity is

¹⁷ Doris Mast 300 p 5, p 6, p 7

¹⁸ TPUD/204 Fagen 1

¹⁹ DR49-C

²⁰ David Mast/300 p 2

²¹ Doris Mast/300 p 2

²² Doris Mast /305 Mast 1, 2, 3 Column A

²³ Doris Mast/305 Mast 1, 2 Column B

²⁴ Doris Mast 200 p 3, p 4

adequate and Option 3 improves reliability and allows for replacement of aging infrastructure the necessity for the transmission line has not been established. Without the transmission line no Oregonian in the central valley or in Netarts – Oceanside forgoes anything desirable or useful.

C. Safety standard ORS 758.015 (2)

Putting a transmission line through the center of Stimson forest will create a fire hazard due to the steep terrain with high coastal winds. Evacuating the population of Oceanside and Netarts would be difficult because a major road has been closed for several years due to landslides. It is not in the public interest to subject the Oceanside – Netarts rate payers to a fire hazard when a distribution line rebuild or Option 3 could increase reliability. Increasing the conductor size would add allow TPUD to serve the existing and future loads of Oceanside – Netarts and Whiskey Creek²⁵.

D. Practicability

The project is not feasible. Where applicant errs is to define the project as building a transmission line when in fact TPUD must use feeder 51 in order to meet the significant need for power to be returned to Tillamook from Oceanside on the segment of feeder 51 that has caused the most serious outages in number and length. While the transmission line decreases outages for the 1,650 people in Oceanside – Netarts, 40% of them served by seasonal meters, placing 10,000 full time residents of the central valley with its critical load on the segment of feeder 51 deemed insufficient to meet the needs of the smaller coastal community is not in the public interest. Spending \$16 Million on a project that will not be able to provide excess power back to Tillamook is not practicable. It is in the public interest to solve the reliability issues in the coastal community without shifting them to Tillamook. The project is not feasible and other options (such as Option 3) should be considered.

E. Justification

The proposed transmission line cannot be justified because it costs over \$16 million and the 22 MW added capacity it provides will not be needed for 38 - 50 years. TPUD could meet its objectives with smaller projects such as rebuilding feeder 51, building Option 3, or switching feeders to Trask to shift more load off Wilson River. Since TPUD can meet its obligation to provide safe and reliable service to existing and future rate payers with

²⁵ Doris Mast 300 p 2

less cost and less impact, the line cannot be justified. The smaller projects also do not cause an increased outage risk for Tillamook by using feeder 51 in an N -1 situation where it would perform poorly.

The people in Oceanside – Netarts will have fewer outages if the transmission line is built, but outages will be shifted to Tillamook which has a larger population. So 1,650 people benefit while 10,000 are harmed²⁶

The costs of the project will be a hardship. The RUS loans TPUD counts on to pay for the project may not be available. In January of 2019 TPUD had to authorize a resolution to go on the market for \$10 million bonds to pay current expenditures because there was a conflict with getting the RUS loan. Doris Mast submitted testimony regarding the financial feasibility of the transmission line project.²⁷ I would like to point out that TPUD's application to the PUC had a segment that dealt with how the transmission line will impact rates for existing members. The last sentence was "The impact is tolerable, and the actual impact is expected to be lower over time *as new load is added* to the system"²⁸ I stand by my testimony and it does reflect what we heard at workshops and meetings, contrary to K.C. Fagen's assertions that there were no assumptions that new load would help pay for the project. The costs are sizeable and the benefits of adding large amounts of debt in a time of falling revenues is not in the public interest. Rate payers should not finance over \$16 Million at 4% interest to add capacity they won't use or to increase reliability when other options that cost less and would not require eminent domain would increase reliability.²⁹

Intervenors have questioned TPUD's calculations and conclusions on longevity³⁰, unit cost arguments³¹, and N -1 load calculation³². Intervenors have entered questions concerning load growth³³. We really want to know how load growth is occurring when energy sales are falling. Intervenor Doris Mast feels there are multiple calculation errors by TPUD based on the above testimony and is concerned that errors in calculation lead to conclusions that are not credible. A CPCN should not be granted on conclusions drawn from incorrect data, especially if it has been mathematically manipulated to give a desired answer. When KC Fagen chooses the highest system peak of 2009 caused by

²⁶ Exhibit TPUD Staff DR-3

²⁷ Doris Mast/300 p 9, p 10, p 11, p 12, p 13, p 14

²⁸ Tillamook PUD/100 Simmons/3

²⁹ Doris Mast/300 p 14

³⁰ Doris Mast/200 p 2

³¹ Doris Mast/ 200 p 3, p 4

³² Doris Mast/200 p 8, 9, 10

³³ David Mast/200 p 2 David Mast/300 p 2 - 9

cold weather as the starting point for a longevity analysis of the 11.5 MW's added to Wilson River, he knows he is implying that all years since 2009 have higher loads than 2009. But he disregards the accepted method used by BPA and TPUD in their forecasts³⁴ because his method uses available capacity faster. The historical record shows us it's false, but FC Fagen continues to manipulate the numbers. Mathematical trickery should not be used to justify the taking of property.

V. Conclusion

There is a logic problem with this project. If the Commissioners agree with applicant that the transmission line is necessary to provide reliable service to Netarts – Oceanside because feeder 51 cannot be sufficiently rebuilt, and they agree with the applicant that there is a significant need to provide back-up capacity from Oceanside to Wilson and Trask substations, then they must deny the petition for a CPCN because the additional power cannot reliably be taken to Tillamook by feeder 51. They can also deny the petition for a CPCN on the evidence in the record by intervenors that Option 3 can perform reliably and that capacity in the central valley is adequate.

Based on the evidence in the record in this proceeding, the Commission can find that TPUD has not met the legal requirements under ORS 758.015 for granting a CPCN. Doris Mast Intervenor respectfully requests that the commission deny TPUD's Petition for a CPCN and not authorize the construction of an 8.6-mile-long overhead transmission line from a breaker in the Tillamook Substation owned by BPA to the proposed new Oceanside Substation.

Dated this 12th day of March 2019 /s Doris Mast

³⁴ DR 41-1 – DR41-8, DR 28-4, DR28-2