

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

IN THE MATTER OF IDAHO POWER COMPANY'S	Docket: PCN 5
PETITION FOR CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY	Reply Brief
	Intervenor: Sam Myers

Date: May 30, 2023

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Introduction:

Mr. Myers will point out the many mischaracterizations along with errors and omissions in the Opening Brief of both the; OPUC Staff and IPC.

Mr. Myers would like to point out on page 26 of IPC's opening brief paragraph. IPC is now characterizing their engineering standards as meeting "minimum requirements" and actually exceeding some. This new characterization of standards is drastically different from those used in the IPC's application to the PUC. In the application to the OPUC, IPC described their standards as "stringent" and meeting the most extreme weather conditions; however, now it seems that IPC has had to recharacterize the degree of their standards because they were forced to reveal what they really are, which are mostly "minimums". This showcases the unprofessional tendencies of IPC. It also reveals the poor level of "Good Faith effort". It also undermines the public trust of IPC. Mr. Myers is very concerned that IPC lied to the OPUC, petitioners, and the ALJ by mischaracterizing the engineering standards used for B2H.

Mr. Myers will refer to page 26 of IPC's opening brief where they refer to the use of alternative engineering standards, these standards were brought to their attention only as an example that structures and Towers of critical importance should be designed to have exceedingly high reliability. B2H has been characterized as "critical" in nature as infrastructure. B2H deserves to have more structural reliability built into the design but IPC fails to use any of the "Elevated Reliability" standards listed within the ASCE Manual 74, 4th edition.

IPC claims on page 27 of their opening brief that the evidence of local wind data reading of 88.4 miles an hour is without merit. I strenuously object to this characterization. IPC has shown no evidence whatsoever to make that claim. IPC has presented no other data for the area, nor does IPC seem to know anything about the wind metering tower. IPC has never asked about specific information from the metering tower. IPC's claims that this data is without merit is unfounded and reveals a lack of responsibility towards providing safety for those people around B2H and for lives and property underneath B2H. In fact, IPC should have embraced this data as recommended in the ASCE manual 74, 4th edition and sought to properly design the towers with the newer methods from the ASCE to incorporate these accurate localized wind speeds. Mr. Myers now references PUC rules; 860-024-0001, Division 24, (3) This rule requires utilities to use "facts reasonably discernible at the time and given applicable local conditions". IPC should be forced to use the wind data that Mr. Myers has provided. Mr. Myers has come upon this data through commercial wind metering devices which are identical to equipment used throughout the nation to discover and publish elevated wind speeds. Mr. Myers asserts this rule directs utilities to use local conditions whenever possible. PUC must enforce this rule; for the safety and reliability of B2H.

Furthermore, on page 27 of IPC 's Opening Brief, IPC claims Mr. Myers' assertion that the tower design they have chosen will not operate safely is without merit. IPC makes this claim only because they continue to reject the elevated wind data that Mr. Myers has provided. IPC has NO local empirical wind data to confirm the standardization choices they have made. IPC only uses the charting from ASCE 7-16, using the 100 year MRI wind speed map. IPC can

select this wind speed map to choose a design wind speed, but this is old charting from prior editions which do not include localized wind speeds. Our localized wind speeds have been clearly documented to eclipse the charting data, thus proving it unreliable. IPC has chosen to double down on their standard choices. IPC at this point is not following “Best Industry Standards”, thus placing lives and property at risk. IPC claims that the design for B2H will have a loaded MRI of between 700 and 10,000 years for Morrow County; however, this is from old standardized ASCE chartings that are basically irrelevant when localized wind data are incorporated into the design. IPC claims they are using MRIs that seem very high when in fact they are not that high at all. This is a convenient way for Idaho Power to look like they've embraced high standards when in fact they are not meeting the most basic standard.

Idaho Power claims on page 28 of their opening brief that fragility analysis and coupling vibration studies are not applicable to B2H. IPC is ignoring elevated reliability and is NOT preparing for the most extreme contingencies possible. Mr. Myers has pointed out studies that prove fragility tests provide the safety measures needed to verify the structural capabilities and capacities of transmission line Towers. His filings have shown multiple Tower failures from failing to recognize both wind angle and also show misguided wind speed capacities for some Bonneville Towers. Mr. Myers asserts that if IPC was concerned about safety and reliability they would perform all available tests to verify that specific wind attack angles are not an issue with the Bonneville Towers they have selected. Best industrial practices should be employed in order to verify and/or discover the possible weaknesses of the B2H towers; all contingencies should be covered. Mr. Myers would like to refer to the OPUC rules 860-025-0030. 2. (o). This rule

requires the applicant to have performed all “Reliability and Resiliency Studies” known to the petitioner at the time the petition is submitted. Mr. Myers asserts that a number of important design studies have not been performed on the B2H towers. IPC should have known about these newer testing capabilities and requested BPA to perform the latest tests to verify tower design capabilities under all circumstances. IPC claims they are not required to perform these newer testing procedures but OPUC needs to force IPC to fully comply with this rule to ensure the safety of Oregon Citizens.

IPC contradicts itself in its response to Mr. Myers claims of IPC having an inadequate analysis of tornadoes and earthquakes. On page 28-29 IPC admits to one of the tornadoes that occurred in our region. IPC makes a significant omission in their testimony. The calculated 3 second wind gusts are placed at between 88-110 mph for a tornado. IPC claims that the TOWERS would remain upright; however, they fail to mention that the wind gusts are higher than the maximum wind gust limit for the B2H conductors. The omission represents contradiction to their assertion that the line would survive a tornado or extreme weather event. Mr. Myers asserts that the conductors could actually fail at this wind speed, and break off the line causing a massive fault. IPC has only designed the conductors to handle max loaded wind speed of 100 MPH. This omission presents the problem B2H has when it comes to withstanding extreme events. IPC can not provide a structural loading buffer that ensures safety and reliability. In the cross-examination hearing, Mr. Stipple offered an incoherent excuse for the low wind rating on B2H’s conductors. Mr. Stipple’s response did not provide any empirical data about loading coefficients and offered a personal opinion of conductor reliability. It should be noted that in roughly the last 100 years the B2H route would have experienced 2 and possibly 3 tornadoes.

Mr. Myers documented the 1888 cyclone in his filing: Intervenor Cross-answering and rebuttal Testimony, page 7. The referred cyclone is probably not recorded in the State records. The 3rd possible event occurred in 1995, also documented in Mr. Myers' briefing; Opening Brief, page 517. This irrefutable evidence proves that IPC has developed an under-designed Transmission line in a wind zone that is totally misunderstood.

Mr. Myers objects to the reference on page 29, of IPC Opening Brief. that they have applied adequate coefficients to protect B2H from the upcoming Cascadia Event. Absolutely no empirical data has been shown to make that assertion. The Cascadia Event will have almost 2x longer sustained movement than historical seismic events. IPC offers no real data that it can withstand that kind of seismic activity. IPC should not be allowed to refer to some obscure standard and not provide additional design coefficients for this most critical event.

Mr. Myers objects to the OPUC Staff decision to approve the B2H transmission line structural loading. On page 9 of the "Staff's Opening Brief", the staff use multiple paragraphs to review the selection of standards. Mr. Myers has repeatedly cited the need for elevated reliability standards for B2H. The B2H project area within Morrow County has experienced many weather events that do not fit into the charting of the ASCE or NESC basic charts. The OPUC Staff is making a huge mistake by continuing the "Status Quo", business as usual choice. The absence of any demand for IPC to use; Elevated Reliability standards, will lead to more fires, tower failures and conductor failures. Nothing changes by this approach. The same disasters continue to happen.

Mr. Myers objects to IPC claims that fire will not damage soils under B2H. On page 36, IPC claims that the damage soil remediation issues were fully litigated and resolved in the EFSC proceedings. I would like to point out that any proceedings from the EFSC does not provide cover for IPC when it comes to meeting the OPC rules 860. OPUC is obligated to follow its own rules to prove safety. Mr. Myers asserts that Mark Madison's testimony has been discredited by his own inconsistent testimony. Mr. Myers would assert that Mark Madison has never issued any scientific studies or admitted any evidence using the soils, the climate, and the cropping systems that occur in Morrow County under B2H. Mr Mark Madison's testimony has been opinion driven without any other substantiation. Mr. Madison has NOT shown any evidence that if a fire did move through our wheat fields it would have no impact on the soil. Mr Madison does not have any evidence to substantiate that a fire-burned soil in our area will continue to yield the same as a non fire-burned soil. Those such studies simply do not exist. Mr. Myers has provided multiple testimonies, first hand experiences, and scientific documentation from journals that indicate fire damage is a very real problem that has very real consequences on soils. In his testimony he points out long-term side effects from fires that go well beyond the immediate year losses. Yield reductions by burned soils will have huge financial impacts by reducing the 10-year insurance yield averages which lower the yield income potential. Mr. Myers has sought to bring this issue to light many times.

Mr. Myers would like to point out for the record that EFSC rulings do have multiple controversies. For the record, I have introduced Suzanne Foughty's Appendix A. In these documents, which were introduced as a Public Comment in the Docket dated January 10, 2023, Suzanne Faughty provides evidence of the probable failures within the soil analysis studies that

IPC performed. She pointed out the failures from both the IPC studies and how the ALJ ruling further contributed to covering up the problems she discovered. Suzanne Foughty asserts that; EFSC, ODOE and Administrative Law Judge Greene Webster (ALJ) did NOT do a Fair, proper, unbiased, thorough and accurate process concerning the soil analysis that IPC used in the soil protection standard computations. The preponderance of evidence that Mrs. Foughty presented is undeniable. This testimony sheds light on the soil issue in general and substantiates my assertion that IPC is dodging the responsibility they have to recognise these soil issues.

Mr. Myers rejects the conclusion that Mr Lautenburger reaches on page 34. Mr. Myers asserts that dust/chaff clouds can pose significant risks for fire ignition through conductor faulting. Lautenburger fails to describe how many miles of 500 kv lines are currently located over dryland wheat fields located in the most fire prone region of Morrow County. Mr. Lautenburger fails to bring perspective to the argument by NOT counting the current number of combines interface with 500 kv conductors in this dry region of Morrow County. The current number of combine interfaces with 500 kv conductors in this fire prone region of Morrow County is near zero. B2H will traverse the most fire prone region where low humidity can allow sparks to travel much further than other more humid regions. Mr. Lautenburger has a history of distorting facts about fires in Morrow county and the size of fire ignitions in the area. Hundreds of acres will be harvested by extremely large combines creating dust/chaff clouds as they seek to harvest grain for profit. My point is that with the introduction of B2H we will have hundreds more opportunities during the harvest each year to have faulting occur. This phenomenon has introduced a new risk to a community who has never experienced this risk before, and it is very likely to incur ignitions as the wind shifts unexpectedly while harvesting. Mr. Lautenberger is

not forthright about the current dryland acres being covered by the 500 kv lines, thus his conclusion is irrelevant because the number of combine interfaces under conductors are increased by a factor of 50 or more. Mr. Lautenberger presents an oversimplified and misleading conclusion about dust/chaff risks. The testimony of the fire chief Steve Rhea, describes the potential chaff fault event on page 1 of my Amended Opening Testimony, dated Feb. 3, 2023. Mr. Rhea's testimony 2nd Event, describes events which leads us to conclude that the most probable cause of fire ignition for the event was a transmission line fault though a combine produced chaff cloud.

Mr. Myers would like to address the OPUC Staff in the matter of ROW compensation. In the Staff's Opening Brief page 19, the Staff makes references to crop land (EFU) financial impacts during the construction phase of the project. This is significant; but long term costs can be significantly larger. The true long term financial impacts landowners and tenants will face when B2H is placed on EFU zone crop lands must be considered. The OPUC Staff also admits on page 20, lines 1- 4, that it is unlikely that some impacts can be entirely eliminated. Below is a financial calculation for these impacts that are not entirely eliminated. The true impacts Mr. Myers farm will experience over the life of the proposed project are as follows:

1. Soil damage and lost grain sales from transmission line fires: \$1,500,000.00 per mile of ROW. Prorated based on percent impacted per property owner impacted.
2. Lost use of airstrip. New Airstrip construction costs: \$100,000.00.
3. New hangar construction: \$80,000.00
4. Lost ability to use crop dusters in irrigation field and resulting need for drone applications:
 - A. Drone costs: \$80,000.00

B. Additional drone flight costs including training and equipment purchases:
\$50,000.00

C. Long term dryland drone application costs: \$100,000.00.

5. Reduced land value costs: \$750,000.00
6. Increased weed control costs over the life of the project: \$200,000.00
7. Increased labor costs from tower avoidance and fault avoidance activities, over the life time of the project: \$800,000.00
8. Transmission line induced communications failures, including cell data service interruptions, local 2-way radio interruption and GPS interruptions. These interruptions will cause labor and farm activity delays along with the restrictions on instructional capabilities will cause confusion and resulting ineffective use of labor. All these issues will lead to major delays in farming activities. Farm activities depend on timely completion of the many tasks per year. The inevitable delays caused by B2H can become financially burdensome. These costs are \$600,000.00
9. Additional administration and legal costs involved with all the various IPC interactions; \$100,000.00
10. Loss on crop production during construction time period; \$30,000.00

Detailed review of cost analysis predictions are available on request.

These are the cumulative costs involved with our specific farm. These estimates might seem exorbitant at first glance but considering the continued impacts year after year for the next 100 years the costs become very realistic. Mr. Myers would point out that the OPUC Staff has never reached out to the local farmers in our area to get a realistic perspective of the true interruptions that B2H will have on farming operations for the next 100 years. These impacts are things that we did not have to deal with prior to B2H but from now on Mr. Myers' workload is significantly increased just to maintain his current financial stability. OPUC staff has failed to adequately quantify the exorbitant financial impacts to our farming activities. Simply put, IPC

has brought these financial burdens upon the community for the purpose of IPC's profit. IPC should be prepared to fully compensate Mr. Myers for any financial burdens he will now face. IPC has NOT offered any type of compensation to mitigate these matters.

Mr. Myers would like to address the OPUC Staff in the matter of Alternative Routes. On page 22 of the Staff's Opening brief, they refer to the approval of either the: Proposed or Alternative Route. Mr. Myers would like to know which Alternative Route OPUC approves. Clarity is very important.

Mr. Myers would also question the OPUC Staff as to why they gave no apparent preference or consideration to require IPC to exercise the statute; OAR 345-021-00109 (1) (b) (D) i-viii, which states as follows: "Least percentage of the total length of pipeline or transmission line that would be located within lands zoned for exclusive farm use". This particular statute has been largely ignored by all parties involved. Mr. Myers and Mrs. King have REPEATEDLY referenced this statute to exercise for numerous reasons. The benefits of the statute are enormous if utilized. I believe that the OPUC Staff has failed to place this statute as a guiding principle within this contested case.

Mr. Myers refers to the Cross Examination of Mr. Colburn on page 106-108. Mr. Colburn does not show any respect for the statute mentioned above. Mr. Colburn admits that IPC will not review the possibility of considering an alternative route to execute or exercise the statute in any

way. This refusal of IPC to reconsider this statute at this point shows continued indifference to Oregon Statutes, local environmental concerns, local farming practices, and the livelihoods of those impacted. It is most disappointing that OPUC does not represent and become an advocate for negatively impacted citizens. Statute enforcement, especially in this case, could provide protections for miles of EFU zoned lands. EFU designated lands are extremely important, and should be afforded the premium status and protections that an EFU designation should provide.

conclusion

IPC has not proven itself capable of constructing or operating B2H. The structural design failures, fire mitigation plan failures, fire contingency failures, misguided recognition of local fire risk conditions, refusal to incorporate applicable EFU zone statutes and incomplete required studies prove the inability of IPC to properly construct and operate such a project without placing the general public in severe danger. It also seems as though the OPUC is actually advocating for the IPC not the actual public consumers defined within its guiding Mission Statement. Allowing IPC to have this Certificate gives birth to the next episode of “Engineering Disasters”, Please do not let this happen. IPC has not proved themselves worthy.

I have shown with a preponderance of evidence the; inadequacies and failures of IPC. I stand behind my filings and research; believing it to be as true and accurate as possible with the given time restraints that were placed upon me. Without any doubt a better, safer version of B2H exists. That version will ONLY happen if OPUC flexes its regulatory muscles and forces IPC to reapply using safer strategies on all the issues I have exposed.

DECLARATION

I hereby declare under penalty of perjury under the laws of the State of Oregon that I prepared the above Reply Brief for the PCN5 docket, and that to the best of my knowledge and belief, declare the statements, testimony and exhibits to be true and that they were made for use by the Commission as evidence in this proceeding.

Dated this thirtieth (30) day of May, 2023.

/s/ Sam Myers

Sam Myers

Intervenor, PCN-5