Oral Testimony by Warren E. Halverson, January 22, 2020 before the Washington Utilities and Transportation Commission, DOCKET UE 190529; UG 190530 Bellevue City Hall

Commissioners Danner, Rendahl and Balasbas. Thank you for holding this Hearing in our community. My name is Warren Halverson – a 40 year resident and ratepayer in Bellevue. Both my daughters and their families live here. I am a retired business executive, formerly with U S West – a regulated telecommunications company. I have been very involved in the community, most recently electrical reliability issues and currently serve on Puget Sound Energy's Technical Advisory committee for the Integrated Resource Plan.

I know "rate-making" is a very complex issue and I do not pretend to be an expert but I would like to share a few concerns about the proposed rate increases.

The electrical industry is going through significant changes -- technological, customer preferences, competitive options, climate change, declining growth -- to mention a few. This is similar to what I experienced in the telecom industry. It is important then that PSE be financially viable for stockholders, employees and ratepayers during these tumultuous times. Reliable power is important.

My concerns:

PSE's request for a 7 percent hike seems really high in relation to economic growth and inflation. Having developed budgets and managed large organizations, I would hope that you would review in detail – that is line by line – the assumptions and actual statistics that require this huge increase in ratepayer bills.

A second concern and maybe the overriding one is whether the models being used adequately take into consideration macro trends and impacts like wind, solar power, batteries, micro grids, conservation, clean energy initiatives WEATHER.

Thirdly, after ten years of dialogue about Energize Eastside, some of the most significant questions still remain unanswered. For rate making purposes my concern here is how much is it going to cost? Will it be \$200 million, \$300 million, or even more in out of pocket expense? Then, will it be a Billion or even more over the 40 year life of the Energize Eastside project? This is a huge expense for what is basically an off the shelf, brick and mortar type product. It seems to me that we should know those projected costs as part of any prudency determination. Who knows maybe there is a more prudent alternative.

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We do know from FERC reports that PSE has already spent \$70 million dollars. That's a lot of money! I have been told that this is categorized as ongoing product development expense, expensed on an ongoing basis. For an old age solution like transmission lines – off the shelf so to speak – this all seems real odd. The WUTC needs to take a closer look and perhaps even an audit of all expenses associated with this one project to determine if this is a prudent use of ratepayer monies.

Finally, I would like to share with you an article from today's Wall Street Journal entitled "Glut Pushes Natural Gas Prices Below \$2". More often than not the price of a product is highly correlated to the cost of goods sold (Share graph) So, my concern is: "How can the price of natural gas go up so much when the expense associated with it is dramatically falling?"

The author further notes "warmer than expected weather this season has helped drive prices down" The applicability here for modeling is not only natural gas but peak electrical demand.

Thank you for your consideration.

PSE TAG member to PSE's IRP

425-883-0568;

Attachment WSJ, Jan 22, 2020 "Glut Pushes Natural Gas Prices Below \$2"

Added Verbally: As Kevin Jones, TAG member, Suid the IRP process has not provided answers. Several years as we were encouraged by Phillip Jones and skift to get involved to get answers to basic questions about hood flow studies and forecasts for Energize Eastside. Today, Psé and Forecasts for Energize Eastside. Today, Psé still does not provide basic answers. We need you help.

Glut Pushes Natural Gas Prices Below \$2

By SARAH TOY

The frackers have broken the natural-gas market.

The price of natural gas typically rises this time of year as temperatures plunge and homeowners dial up their thermostats. Instead, the price of the heating and electricity-generating fuel has dropped to multiyear lows.

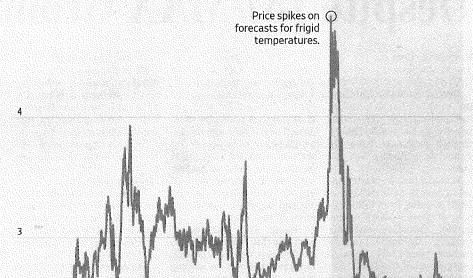
On Tuesday, natural-gas futures fell below \$2 per million British thermal units to their lowest level in nearly four years, highlighting how a persistent glut has buffeted energy investors and producers. This winter's mild weather has joined an oversupply of the commodity to push natural-gas prices down to levels not seen since March 2016. On Tuesday, futures fell 5.4% to \$1.895 per MMBtu.

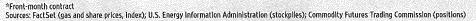
The shale boom, spurred by horizontal drilling and hydraulic fracturing techniques, has transformed the U.S. energy industry and flooded the market with oil and natural gas in recent years. The decline in prices has hit shares of energy companies, raising calls for them to curtail production. But few analysts see signs of the glut abating soon: The U.S. Energy Information Administration predicts dry natural-gas production in the U.S. will rise by 2.9% in 2020.

The fall in prices has come faster than analysts and traders had predicted. Colder winter temperatures typically drive up prices as homeowners demand more fuel to heat their houses. However, warmer-than-expected weather this season has helped drive prices down, adding to investors' grim outlook.

The move below \$2 per MMBtu adds more pressure to natural-gas producers, whose shares have taken a beating in the past year.

Shares of Pittsburgh-based **EQT** Corp., the nation's largest natural-gas producer, have





2018

fallen more than 60% in the past 12 months. The company said last week that it was planning to write down the value of its assets by up to \$1.8 billion, partly due to low gas prices. In September, the company said it would lay off about a quarter of its employ-

2016

Natural-gas futures price' \$5 per million British thermal units

Shares of **Gulfport Energy** Corp. and **Antero Resources** Corp. have plummeted around 80% in the past year, while shares of **Range Resources**

Corp. have fallen more than 10% reduction in spending 65%. among the oil-field services

On Tuesday, oil-field services company Halliburton Co. said it swung to a loss in 2019 on a decline in revenue that it blamed on diminished drilling onshore in North America, which in turn was due to low commodity prices.

"Gas prices in the U.S. are below break-even levels," Chief Executive Jeffrey Miller told analysts and investors. Mr. Miller said that he expects a among the oil-field services company's customers in North America, with the bulk of those cuts coming in gas-producing regions. Halliburton has been idling equipment to match customers' reduced needs, he said.

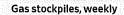
2019

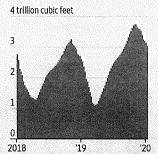
▼ 61% from

2018 high

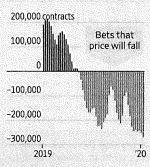
Halliburton rival Schlumberger Ltd. said last week that it too was pulling back in North America.

"The market is giving up early," said Mark Benigno, codirector of energy trading at

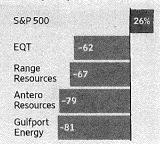




Speculative net positions



One-year index and share-price performance



INTL FCStone. "It's not waiting until the end of the winter anymore for a full price collapse."

Hedge funds and other speculative investors are the most bearish they have been on natural-gas prices since the financial crisis of 2008. Wagers that prices would fall outnumbered bullish bets by 269,944 contracts during the week ended Jan. 14, according to the Commodity Futures Trading Commission.

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I know "rate-making" is a very complex issue and I do not pretend to be an expert but I would like to share a few concerns about the proposed rate increases.

We know that the electrical industry is going through tumultuous times involving significant change. We, too, know reliable power is important. But ... and ... here are my concerns:

PSE's request for a 7 percent hike seems really high in relation to economic growth and inflation. Having developed budgets and managed large organizations, I would hope that you would review in detail – that is line by line – the assumptions and actual statistics that necessitate this huge increase in ratepayer bills.

A second concern and maybe the overriding one is whether the models being used adequately take into consideration macro trends and impacts like wind, solar power, batteries, micro grids, conservation, clean energy initiatives WEATHER.

Thirdly, after ten years of dialogue about Energize Eastside, some of the most significant questions still remain unanswered for rate making purposes. Simply put, my concern here is how much is Energize Eastside going to cost? Will it be \$200 million, \$300 million, or even more in out of pocket expense? Then, will it be a billion or even more over the 40 year life of the Energize Eastside project? This is a huge expense for what is basically an off the shelf, brick and mortar type product. It seems to me that we should know those projected costs as part of any prudency determination. Who knows there maybe a more prudent alternative?

We do know from FERC reports that PSE has already spent \$70 million dollars. That's a lot of money! I have been told that this is categorized as ongoing product development expense, expensed on an ongoing basis. For an old age solution like transmission lines – off the shelf so to speak – this all seems real odd. The WUTC needs to take a closer look and perhaps even an audit of all expenses associated with this one project to determine if this is a prudent use of ratepayer monies.

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The author further notes "warmer than expected weather this season has helped drive prices down". The applicability here for modeling is not only natural gas but peak electrical demand.

I might simply add that I fully endorse comments by other TAG members, especially Kevin Jones. Over five years ago Chairman Phillip Jones and your staff urged us to get involved with the IRP process concerning Energize Eastside Load Flow studies and Forecasts. To date, basic questions remain unanswered. We need your help!

I would appreciate your full consideration of my concerns before approving any increase in rates.

Warren E. Halverson
PSE TAG Member to PSE's IRP
425-883-0568; whalvrsn1@frontier.com

Attachment WSJ, Jan 22, 2020 "Glut pushes natural gas prices below \$2" p B2.