

TESTIMONY REBUTTAL

Q. Please state your name, address and professional position.

A. My name is Paul D. Rolniak. My business address is 12000 N. Pecos Street, Suite 310, Westminster, Colorado 80234. I am a Vice President and principal of EAI, Inc. - a consulting firm specializing in regional analysis of petroleum supply - demand relationships.

Q. Please summarize your professional qualifications with respect to the testimony you are about to offer.

Details of my qualifications are contained in the attached vitae, Exhibit PDR-1, Tab A. I hold a Bachelor of Science in Chemical Engineering (1972) from the University of Arkansas and a Doctor of Philosophy in Chemical Engineering (1977) from Rice University. I have worked for Monsanto Petrochemicals (1972) in Springfield, MA, Exxon Research and Engineering (1977 - 1979) in Baytown, TX, and for Pace Consultants and Engineers (1980 to 1983) in Denver, CO. In 1983, I helped in forming EAI, Inc. At EAI, we specialize in the detailed regionalized analysis of crude oil and refined products supply - demand relationships. EAI's regionalized studies encompass all aspects of the petroleum supply - demand networks; consumption, manufacturing, transportation and pricing. In this capacity, I have been the principle author of EAI's regionalized analysis study of the Pacific Northwest and co-author of EAI's regionalized analysis study of the Rocky Mountain and Pacific Southwest region.

Q. Please summarize your rebuttal testimony.

A. Mr. Wise comments at length on a Chevron pipeline reversal. In his testimony, Mr. Wise acknowledges that it is economically attractive for the Puget Sound refiners to supply product to the eastern Washington market. Mr. Wise asserts that it is impossible to accurately predict

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the outlook for product flows in the Pacific Northwest and then proceeds to propose that the Billings refineries pull product out of economically attractive markets in Montana, Wyoming and Utah and put these barrels in a lower value market area, Pasco and Boise, so that their own product can be backed out of the more economically attractive Salt Lake City market. Mr. Wise is unaware of the magnitude of the product shipments from the Puget Sound to California that can be retracted for use in satisfying Pacific Northwest product needs into the future without increasing crude runs at the refineries or expanding the refineries. Mr. Wise is also appears to be unaware of the start-up of Longhorn pipeline from Houston to El Paso which will back California origin product out of Arizona and make more product available from the San Francisco refineries to ship to Portland. The overall result will be downward pressure on crude runs in the Puget Sound. Mr. Wise appears to be also unaware of the high utilization rates of Billings refineries.

Q. On Page 8, Line 16, Mr. Wise asserts that the Cross Cascades pipeline project will not significantly reduce tank truck deliveries in Washington State, do you concur with this?

A. Mr. Wise fails to point out that CCPL will significantly reduce the tank truck traffic from Harbor Island and the Puget Sound refinery truck racks over Snoqualmie Pass to Eastern Washington. Harbor Island is a high traffic area in a metropolitan location.

Q. On Page 9, Line 3, Mr. Wise asserts that Cross Cascades pipeline will increase truck traffic from Pasco to Clarkson and Umatilla, do you agree with this?

A. First, Tidewater closed its gasoline tankage at Umatilla some time ago and all gasoline for the Umatilla market currently is trucked from Pasco to Umatilla. Second, diesel fuel delivered to Umatilla is for the Union Pacific railyard at Hinkle. As outlined in Exhibit PDR-2, Tab B, the

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economics of the movement of diesel fuel via barge either from Portland to Umatilla or Pasco to Umatilla are favored over trucking diesel from Pasco. Thus, based on economics, the barge movement from Pasco or Portland to Umatilla is likely to continue and therefore there will be no increase in trucking. The same is true for supplying Lewiston, ID currently supplied via barge up the Snake River from Pasco, part of the Portland to Pasco movement. Also shown in Exhibit A, the economics favor barging product from Pasco to the Wilma terminal rather than trucking from Pasco to Wilma. Therefore, based on economics, the barge movement from Pasco to Wilma is likely to continue and therefore there will be no increase in trucking.

Q. Please comment on the analysis of Mr. Wise regarding the eastern Washington area?

In Line 5, page 10, Mr. Wise asserts that truck deliveries from the Puget Sound to Central Washington have increased faster than demand and that this growth is unlikely to be sustained. Since trucking is growing faster than demand is growing this would indicate that the alternative supply sources, e.g. Yellowstone pipeline, Chevron pipeline and barge sources are constrained as assumed by Mr. Hopf in his testimony. Mr. Wise further asserts that growth will be met with deliveries from Yellowstone pipeline, Chevron pipeline and barge sources which the increase in trucking indicates are constrained. Yellowstone pipeline is bottle necked in the Billings to Boseman segment and Billings refineries have been operating at very high rates of utilization, see Exhibit PDR-3, Tab C. To date, the Yellowstone pipeline has not been approved to reconnect the segment from Missoula to Thompson Falls and thus continues to rely on railing of product either from Helena to Thompson Falls or directly to Spokane. Chevron pipeline sources are short of product in the face of growing demand in the Salt Lake City to Boise corridor, so short that Chevron announced a project to reverse the line from Pasco to Boise. Detailed product balances (Exhibit PDR-4, Tab D) on the area encompassing central and eastern Washington indicates that growth in product demand in this area are being met with either increased truck

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movements from the Puget Sound to central Washington or by increased movements of barges up the Columbia River. Considering this situation, Olympic's assertion that growth in product demand in Central and Eastern Washington will be met with product from Puget Sound refineries, either by truck or barge (which Puget Sound refineries also supply) is reasonable especially in light of the historical trends.

Q. On Page 10, Line 16, Mr. Wise asserts that increased product will be shipped via Yellowstone pipeline to eastern Washington, do you concur with this?

A. This again ignores the bottleneck status of Yellowstone pipeline, the rail delivery system currently used to transfer product around the pipeline interdiction, and the high utilization rates of Billings refineries.

Q. On Page 10, Line 16, Mr. Wise expresses uncertainty of the volume of waterborne movement of refined products excluding residual fuel oil that is made from the Puget Sound area to Portland, has EAI analyzed the movement of refined products into the port of Portland?

A. Yes, we have. The database from the Portland Merchants Exchange indicates by date, the vessel, type (tanker / tug and barge), net tonnage, dock visited, origin port and next port of call. It is possible to correct the data for residual fuel oil and asphalt deliveries because only certain terminals tied to certain docks receive these heavy products. The results of the analysis for 1997 are summarized in Exhibit PDR-5, Tab E. Approximately, 14,600 BPD of light product was shipped from Puget Sound origins to the Port of Portland in 1997. Product shipped on Olympic pipeline to the Portland that is subsequently reshipped via barge to Pasco can be rerouted to the Cross Cascades pipeline and will free up capacity on the Olympic Seattle to Portland segment.

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The exact amount of Olympic pipeline capacity that will be freed up is dependent on the economics and type of supply arrangements that California refiners, primarily Chevron, make with Puget Sound refiners but could total as high as 38,600 BPD. Puget Sound refiners would probably prefer to ship the product that is currently shipped via tanker/barge to Portland via Olympic pipeline due to efficiency and economics. Using 1997 as a base, then this would reduce the annual petroleum tanker movement in the Puget Sound by 12 movements and the tug and barge movement by 67 movements.

Q. On Page 13, Line 1, Mr. Wise goes to considerable length in commenting on the reversal of the Chevron pipeline Boise to Pasco segment, what is your view on this testimony?

A. As originally applied for, the transportation and delivery area for Cross Cascades pipeline is the Seattle to Pasco corridor. At the time of the application, the Chevron pipeline reversal announcement had not been made. There is no guarantee that it will actually take place or that Cross Cascades pipeline will even tie into the Chevron pipeline reversed segment. Even if Cross Cascades ties into the reversed Chevron pipeline segment, volumes to shipped through the Chevron pipeline segment are determined by the shippers and not Cross Cascades. Considering that the Boise market has historically been supplied by Salt Lake City refiners and that the retail and distributor make-up is largely represented by Salt Lake City refiners, then the demand for Puget Sound volumes could be very small. For instance, as outlined in Exhibit PDR-6, Tab F, the Longhorn pipeline project may displace California origin product out of the Phoenix market making California supply long. In this case, more product will be available to ship from San Francisco (primarily Chevron and Tosco) to Portland. This California origin product would be the incremental product for shipping on the reversed Chevron product pipeline segment to Boise. This would be true even if the Cross Cascades pipeline segment is not built. This is because the

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incremental California origin product at Portland can be either shipped via barge up the Columbia river to Pasco or exchanged for Puget Sound product shipped on Cross Cascades. Ultimately, the amount of product shipped up the Columbia River to Pasco versus the amount of product shipped from the Puget Sound to Pasco on Cross Cascades depends on the actions of the shippers, the ultimate economics of barge versus pipeline transportation, comparative product manufacturing costs, and the actions of the refining marketing companies.

Q. Please comment on the assertion that Mr. Wise makes regarding not being able to make an accurate forecast regarding the future movements in the Rocky Mountain versus Pacific Northwest supply networks?

A. This would definitely impact the plausibility of their proposed scenarios.

Q. Olympic pipeline uses a long term product demand forecast of 1.5 percent per year, doe the analysis of Purvin and Gertz support this?

A. Yes, on Page 14, Line 1, the analysis of Purvin and Gertz indicates that product demand growth in the eastern Washington area over the last five years has been higher (1.9 percent per year gasoline and 2.3 percent per year distillate) than the base forecast figure used by Olympic (1.5 percent per year).

Q. As an alternative to supplying eastern Washington via Cross Cascades, Mr. Wise proposes a scenario utilizing Billings refinery supply sources through Yellowstone pipeline, do you concur with this?

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A. First, to this date, the proposed Yellowstone pipeline rerouting has not been approved. Second, on Page 16, Line 23, Mr. Wise speculates that the Billings refiners would pull product out of higher value markets where they have established retail, pipeline and refinery assets to put product into a lower value market, Pasco, along non-existing product pipeline corridors [Yellowstone Missoula to Thompson Falls (not permitted to date) and Chevron reversed Spokane to Pasco]. The Billings refiners (mostly Exxon and Conoco since most of Cenex's product moves to the east) do not have the product available and are unlikely to expand their refineries. It is highly unlikely they would choose to pull product out of more lucrative markets (Montana, Wyoming, Utah) where they have established retail assets to put the product into lower value markets (Pasco), where they have fewer retail assets, just so they can displace their own product from the Boise and Salt Lake City market.

Q. Do you concur with the testimony of Mr. Wise regarding the distribution of product from Puget Sound refiners?

A. In general, yes, but specifically, no. In the analysis of Purvin and Gertz, see for example, the commentary on Page 17, Line 16 and the analysis under Tab K, their analysis ignores or is unaware of the large volume (48,159 BPD in 1997) of refined products shipped from the Puget Sound to California, see Exhibit PDR-7, Tab G.

Q. On Page 18, Line 1, Mr. Wise appears to be asserting that market growth in eastern Washington, western Washington and Oregon will be met by Puget Sound refineries, do you concur with this?

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A. No, product supply for the western Washington, eastern Washington and western Oregon supply demand network will be supplied by the combination of Puget Sound and California refineries that have historically supplied it. This is as Olympic has stated in their application.

Q. On Page 18, Line 12, Mr. Wise asserts that when the Chevron pipeline is reversed then product shipments from California or the Puget Sound refineries may increase by 26,000 BPD and this product would be shipped on Chevron pipeline to Boise, do you concur with this statement?

A. This statement is misleading - first 6,000 BPD is the current movement from Boise to Pasco and 20,000 BPD is the approximate capacity of the Boise to Pasco Chevron pipeline segment. Mr. Wise appears to be assuming that this movement of 26,000 BPD would appear on a fairly short time frame when in fact it would take 10 to 20 years to materialize. Mr. Wise states that if Boise demand were to be met solely with product from Puget Sound refineries then the refineries would have to be expanded. This statement completely ignores the fact that in 1997 43,981 BPD of gasoline alone (48,159 BPD of total product) is estimated to have been shipped from the Puget Sound refineries to California, see Exhibit PDR-7, Tab G. Retraction of this product could easily satisfy the projected demand growth in the eastern Washington market and the hypothetical Boise market without any expansion or increased crude runs at Puget Sound refineries.

Q. Do you agree with the analysis of Purvin and Gertz with respect to the product balance for western Washington and western Oregon on Page 18, Line 20?

A. No. Based on EAI's analysis of receipts at the Port of Portland, 14,600 BPD of light product was shipped from the Puget Sound refineries to Portland in 1997. Based on analysis of

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data from the California Energy Commission on receipts of domestic imports into California and data contained in U.S. Department of Energy's Petroleum Supply Annual for 1997, the following shipment of product from the Puget Sound to California took place in 1997:

Gasoline - 33,162 BPD

Gasoline Blend stocks - 10,819 BPD

Jet Fuel - 4,178 BPD

According to the U.S. Corps of Engineers, receipts of waterborne light product at the Port of Portland from all domestic sources was 40,548 BPD in 1997. Also from the database of the Portland Merchants Exchange, the movement of light product from San Francisco to Portland was 19,459 BPD in 1997, see Exhibit PDR-8, Tab H.

Q. On Page 20, Line 16, Mr. Wise appears to be asserting that Puget Sound refineries cannot supply the product required by both the eastern Washington and Boise market, do you concur with this view?

A. No. First, in its original application, Cross Cascades pipeline was not predicated on the reversal of Chevron pipeline which had not been announced at the time. Therefore, the supply of Puget Sound product should not really be an issue. Second, note again that the Puget Sound refineries can supply the incremental product demand in eastern Washington and the Boise market area via retraction of product from California without increasing crude runs or expanding. Third, note further that Mr. Wise suggests that the 20,000 Bpd of product movement to Boise would appear rather instantaneously. This movement would take years to evolve due to the fact that Salt Lake City refineries are still the dominant supply into this market. Ultimately, the origin of the product to be moved on the reversed Chevron pipeline segment is

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determined by the shippers. Since Chevron is the owner of the pipeline from Boise to Pasco, owns the tankage at Pasco, is a primary shipper of product from San Francisco (location of the Chevron Richmond refinery) to Portland (see Exhibit PDR-9, Tab I), is currently one of the primary marketers in the Boise area (whereas the Puget Sound refiners are not), then Chevron will originate product in the most, economical fashion for its shipment on the pipeline. Also note that it is immaterial whether the product originates in California or the Puget Sound. The most likely scenario is that Chevron and other California refineries will continue to ship product to Portland, at Portland, they will decide whether to exchange product with Puget Sound refineries for shipment to Pasco or they will simply ship product up the Columbia River via barge to Pasco. All predicated on each company's position on product supply and the economics of supplying product to the markets.

Q. On Page 21, Line 10, Mr. Wise asserts that Utah refineries are operating at low levels of capacity utilization, do you concur with this?

A. Mr. Wise fails to take into account the derating of the Utah refineries due to being designed for one crude slate and having to run another due to availability and downstream bottlenecks. For instance, Big West - Flying J refinery was designed to process Yellow Wax and Black Wax crudes which have relatively little light ends. Since these crudes have declined over the years, then the Flying J refinery has been forced to process crudes with higher amounts of light ends which forces Flying J to limit crude runs. The true capacity of the Flying J refinery is closer to 16,000 Bpd than to the 25,000 Bpd published figure on crude tower capacity. When similar bottlenecks and derating are taken into consideration for the other Salt Lake City refineries, then the true aggregate capacity is closer to 134,000 BPD. The resulting crude run - utilization profile shown in Exhibit PDR-1, Tab I indicates that the Salt Lake City refineries are operating at full capacity. Based on this long run of full capacity operation versus high product demand

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growth, product exports through the Chevron pipeline started to be retracted in the early 1990's culminating in the Chevron pipeline reversal announcement.

Q. On Page 26, Line 14, Mr. Wise states that there should be refining and pipeline capacity to supply PADD IV and deliver 45,000 to 56,000 BPD of product to eastern Washington, do you concur with this?

A. This is simply not true. Utilization of individual Billings refineries is shown in Exhibit PDR-10, Tab J. Exxon and Conoco refineries are highly utilized and would be required to pull product out of the local Montana and Wyoming markets to satisfy the Yellowstone pipeline movement proposed by Mr. Wise. This makes no sense economically since the Montana and Wyoming and Utah markets are higher value markets than the eastern Washington market and would require Conoco and Exxon to seek unattractive and unavailable product supply arrangements to supply their product supply obligations in those states.

Q. Do you concur with the assessment of the Billings to Casper segment of Conoco pipeline operation put forth on Page 27, Line 10?

A. Conoco delivered more product to the south because they expanded Pioneer pipeline from 34,000 to 48,000 BPD and could access a higher value market. Once the rail delivery system was in place to overcome the Yellowstone interruption between Missoula and Thompson Falls, Conoco and Exxon resumed delivering nearly the full slate of product to eastern Washington that they had prior to the interruption. As a result of this and slightly increased movement on the Chevron Boise to Pasco segment, barge movements up the Columbia River declined from the high values seen in 1995.

Q. Do you concur with the assessment of Purvin and Gertz on the competitiveness of Puget Sound refiners with Billings refiners on Page 28, Line 9?

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A. Mr. Wise asserts that the Puget Sound refineries have higher supply costs to eastern Washington at least partially due to the use of barge transportation to access the Spokane market via the Seattle to Portland to Pasco to Spokane routing. This is true and precisely the reason they would request that Olympic construct a pipeline from Seattle to Pasco. In general, the addition of competitive low cost suppliers also has a tendency to lower prices in the destination markets.

Q. Please comment on the pricing analysis of Mr. Wise on Page 31, Line 17.

A. Mr. Wise states that the Spokane netback is lower than the Billings or Salt Lake City netback. Why would the Billings refineries pull product out of the Montana, Utah or Wyoming markets to put an oversupply of product into the lower valued Spokane and Pasco market? This makes no sense.

Q. Please comment on the analysis of the Mr. Wise on Pages 32 and 3 regarding the economic driving force for Puget Sound refineries to supply eastern Washington and Boise.

A. I concur with Mr. Wise - it makes economic sense for the Puget Sound refineries to supply eastern Washington and Boise.

Q. Do you agree with the assertion of Mr. Wise on Page 33, Line 8 that there is insufficient gasoline to divert from the export market to supply the Boise market?

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A. No. First, as demonstrated previously, there is clearly plenty of gasoline available from retraction from the Puget Sound to California movement. Thus, there is no need to expand the Puget Sound refineries.

Q. Do you agree with the assessment of Mr. Wise with regard to Canadian crude supply on Page 35, Line 10?

A. I agree partially. Canadian crude is exported to the U.S. Midwest, Rocky Mountain, and Northern Tier markets. Although Canadian crude production is declining, production of synthetic crude in Canadian is projected to increase substantially and IPL is ceasing exports of crude to eastern Canada (Line 9 reversal) in 1999. Midwest and Northern Tier also have access to foreign and domestic crude supplies from the Gulf Coast. Because there is not enough Canadian crude to satisfy all the Canadian and U.S. market destinations, the ultimate disposition of the Canadian crude will be set by prices received in the various markets. Therefore, if the Puget Sound refineries want more Canadian light crude, they can bid up the price such that it moves to the Puget Sound. This is the normal economic mechanism followed when crude supplies become short in one area versus another.

Q. Do you agree with the assessment of the impact on waterborne movement of petroleum put forth in the discussion starting on Page 36, Line 4?

A. First, Puget Sound refineries can satisfy the demand for products via retraction of product from the California market. Second, Mr. Wise fails to consider the impact of the start up of Longhorn pipeline from Houston to El Paso, Exhibit PDR-6 Tab F. This pipeline will displace California product from the Arizona market and make California supply long, which it already is. In this circumstance, California refiners will seek to move more product from San Francisco

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to Portland or reduce crude runs. Additionally Puget Sound refiners will seek to retract product exports to California. This is already occurring. Tosco announced that it is shutting down some of its San Francisco crude tower capacity. Chevron announced that it is reversing the Boise to Pasco segment such that it can move product from San Francisco to Portland and potentially to Pasco for movement to Boise. Lastly, Tesoro is rumored to be withdrawing product exports from its newly acquired Anacortes refinery and redirecting these exports to Alaska where Tesoro is cutting back crude runs at its Nikiski refinery. Overall, the current evolution of the refined product network suggests that crude runs at the Puget Sound refineries may actually decrease.

Q. On Page 36, Line 17, Mr. Wise asserts that increased refinery production of distillate will have to be exported, do you concur with this?

A. Mr. Wise presents no analysis but appears to be failing to account for the historically higher growth rate of distillate demand compared to gasoline.

Q. Do you agree with the scenario put forth on Page 37 in which Mr. Wise asserts that the product market will increase by 20,000 in year 2000 due to the reversal of Chevron pipeline and will result in increased Puget Sound crude runs?

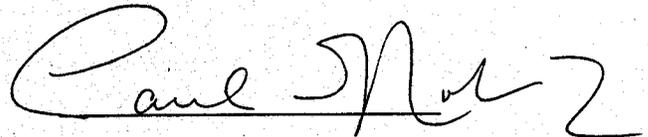
A. As discussed earlier, this is extremely misleading. The reversal of Chevron pipeline will increase the accessibility of the Boise market from Pasco. This market is currently supplied by Salt Lake City refineries and Salt Lake City refiners have made no announcement that they are withdrawing from the Boise market. Additionally, Mr. Wise fails to note that Chevron could supply all the product for this pipeline reversal via product movement from its San Francisco refinery. Mr. Wise further asserts that because pipeline capacity will open up along the Olympic

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Seattle to Portland route therefore Puget Sound refineries will expand to fill this open capacity. As observed earlier, Puget Sound refineries are more likely to fill this open capacity with product that is already moving via water from the Puget Sound to Portland (14,600 BPD, 1997) or with product that is already moving from the Puget Sound to California (48,159 BPD, 1997). Mr. Wise fails to note that California based product (ANS coking refineries and California Heavy crude coking refineries) moving via water into the port of Portland is already competitive with Puget Sound refinery product. If the California market goes supply long with the startup of Longhorn pipeline then more San Francisco product will move to Portland. This situation is likely to decrease the need for crude runs at the Puget Sound refineries (lowering waterborne crude movements) and make the need for expanding the refineries far less likely.

END OF TESTIMONY

I declare under the penalty of perjury that the above testimony is true and correct to the best of my knowledge. Executed this 20th day of March 1999.



Paul D. Rolniak