Decision 10-11-010 November 19, 2010

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Pablo Bay Pipeline Company LLC for Approval of Tariffs for the San Joaquin Valley Crude Oil Pipeline.	Application 08-09-024 (Filed September 30, 2008)
And Related Matters.	Case 08-03-021 Case 09-02-007 Case 09-03-027

INTERIM DECISION DENYING APPLICATION TO CHARGE MARKET-BASED RATES

1. Summary

The application of San Pablo Bay Pipeline Company LLC to charge market-based rates for transportation of crude oil on its heated pipeline from the San Joaquin Valley to the San Francisco Bay Area is denied.

2. Background

This application was filed in response to Commission Decision (D.) 07-07-040 which found that a heated crude oil pipeline between the San Joaquin Valley and the San Francisco Bay area (Pipeline) is a public pipeline subject to regulation by this Commission. The decision ordered the Pipeline's owner to apply for tariffs. The owner at the time we decided D.07-07-040 was Equilon Enterprises LLC (Equilon), an affiliate of Shell Oil Company (Shell Oil). Equilon, Shell Trading US Company (STUSCO) and the applicant, San Pablo Bay Pipeline Company LLC (SPBPC or Applicant) comprise the Shell parties.

The application asks us to approve transfer of the ownership of the Pipeline from Equilon to SPBPC and the proposed tariffs submitted by SPBPC in connection with the application. The application was protested by shippers of crude oil on the pipeline including Chevron Products Company (Chevron), Tesoro Refining and Marketing Company (Tesoro) and Valero Marketing and Supply Company (Valero). Each of Chevron, Tesoro and Valero has also filed claims for refunds of allegedly unreasonable charges for shipping crude oil on the Pipeline during the period from April 1, 2005 through the effective date of SPBPC's approved tariffs (Past Period).

Evidentiary hearings were held between May 10 and May 20, 2010. More than two dozen witnesses' testified and more than 200 exhibits were admitted into evidence. The parties submitted concurrent opening briefs on June 21, 2010 and concurrent reply briefs on July 19, 2010.

The Assigned Commissioner's Scoping Ruling identified the issues for resolution in this proceeding. Issue 3 is framed as follows:

> 3. Is SPBPC entitled to charge market-based rates for transporting crude oil on the Pipeline? More specifically,
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> a. Does SPBPC exercise significant market power over shippers by virtue of its control over the only heated crude oil pipeline between the San Joaquin Valley and the San Francisco Bay area?
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> b. In particular, is SPBPC able to damage competitors of its affiliates by denying them access to the Pipeline or charging them an exorbitant rate to use it?
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> c. Do shippers of crude oil from the San Joaquin Valley to the San Francisco Bay area have reasonable competitive alternatives to the Pipeline?
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> d. In particular, does Tesoro have reasonable competitive alternatives to supply the crude oil requirements of its refinery in Martinez?

For reasons discussed in the balance of this opinion, we conclude that SPBPC possesses significant market power and may not charge market rates for transporting undiluted heavy crude oil from the San Joaquin Valley to the San Francisco Bay area.

Discussion

Crude oil is graded according to its specific gravity (roughly speaking, its viscosity) according to a scale developed by the American Petroleum Institute (API). The higher the API gravity of a crude oil, the less viscous it is. Crude produced in the San Joaquin Valley falls into two broad grades, heavy crude with an API gravity of approximately 14 (SJVH) and light crude with an API gravity of approximately 34 (SJVL).[1] About two-thirds of the oil produced in the San Joaquin Valley is SJVH. At room temperature, SJVH is a tar-like substance that cannot be shipped via pipeline. In order to transport undiluted SJVH by pipeline, it must be heated to a temperature of approximately 140 degrees Fahrenheit and remain at or near that temperature for the entire time it is in the pipeline.

SJVH can be shipped unheated if it is blended with a sufficient quantity of SJVL to make it liquid at room temperature (SJV Blend). Some of the SJVH produced in the San Joaquin Valley is blended with SJVL and shipped via unheated pipeline to refineries in northern and southern California. However, the Bay Area refineries protesting this application receive only SJVH via the Pipeline. Collectively, they receive about 60,000 barrels per day (bpd) of SJVH.[2]

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[1] *Rebuttal Testimony of David J. Hackett on behalf of San Pablo Bay Pipeline Company*, at 6.

[2] *Id.*

In D.07-07-040, while we noted that Applicant has a monopoly over the pipeline transportation of unblended SJVH to the Bay area, we did not address (i) actual or potential competition in the transportation of SJVH (ii) other sources of substitutable crude oil or (iii) the degree to which such competition or alternate sourcing constrains Applicant's pricing of its pipeline transportation service. We address those issues in this decision.

As set out in the Scoping Ruling, the central question for decision with regard to the application for authority to charge market-based rates is whether the Applicant possesses sufficient market power to extract supra-competitive rents from shippers of SJVH on its Pipeline. Since the burden of proof on all issues identified in the Scoping Ruling is on Applicant,[3] SPBPC had to prove that it lacks significant market power and that shippers have alternative means of meeting the crude needs of their refineries.

To prove its lack of significant market power, Applicant introduced the testimony of its economic expert Michael Webb.

As a first step in his analysis, Webb defined an "origin market" for crude shipped on the Pipeline consisting of all the oil produced in California Department of Conservation Production Districts 4 (Bakersfield) and 5 (Coalinga) plus some production from District 3 (Santa Maria) and

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[3] " [T]he ultimate burden of proof of reasonableness…never shifts from a utility which is seeking to pass its costs of operations on to ratepayers on the basis of the reasonableness of those costs. (*Pacific Gas and Electric Co*., D.00-02-046.)

"It is a fundamental principle of public utility regulation that the burden rests heavily upon a utility to prove it is entitled to rate relief and not upon the commission, its staff or any interested party…to prove the contrary." *In the Matter of the Application of the Golden State Water Company (U133W) for an Order Authorizing it to Increase Rates for Water Service etc.* (D.08-01-020.)

approximately 65,000 bpd produced in the Outer Continental Shelf and brought by pipeline to the San Joaquin Valley.[4] In sum, in the San Joaquin Valley origin market, as defined by Webb, approximately 535,000 bpd have to be cleared via pipelines or other modes of transportation.

Webb's next step was to calculate the degree of market concentration in his defined origin market, using the Herfindahl-Hirschman Index (HHI). Briefly, the HHI measures market concentration by summing the squares of market share enjoyed by various competitors. For example, an HHI of 10,000 indicates a monopoly. (100 percent share of market squared equals 10,000). If that market had ten participants each capable of supplying 10% of demand, the HHI would be 1,000 (10 share of market squared = 100; 10 times 100 = 1,000). For his defined origin market, Webb calculated an HHI of 1,289, indicative of a competitive market.[5]

Webb put forth a second line of argument in support of his conclusion that Applicant lacks significant market power, based on the approach developed by the Commission in the so-called "Unocap" case.[6] In that case, we held that if a pipeline has significant competition and large, sophisticated customers, charges rates that are comparable to those charged by similar pipelines, faces meaningful potential competition in the event it raises rates, and achieves a reasonable return on its rate base, then its existing rates and, by implication, any future rates,

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[4] *San Pablo Exhibit SP1, Direct Testimony of Michael Webb* at p. 25; see also *San Pablo Exhibit SP-2C, Rebuttal Testimony of Michael Webb* at Appendix E1.1.

[5] *SP2C Webb Rebuttal* at 42.

[6] *City of Long Beach vs. Unocal California Pipeline Company* 66 CPUC2d 28 (1996).

should be approved as "just and reasonable" and need not be set on a cost of service basis. Webb testified that SPBPC meets this "five factor" test.[7]

Finally, Webb calculated what he termed the "competitive [transportation] price" for SJVH delivered at the refinery gates in the Bay area. He testified that this price is "at least" $2.70 per barrel.[8] Since SPBPC's current transportation price is $1.90 per barrel, Webb concluded that cost-of-service ratemaking is unnecessary.

Webb's analytic methods and his conclusions were vigorously disputed by independent shippers' experts.

With respect to the definition of the origin market and the related HHI calculation, Chevron witness Alan J. Cox testified that Webb's definition of the origin market is erroneous. According to Cox, the origin market consists of the Pipeline, ExxonMobil's proprietary pipeline and the San Joaquin Refinery. The HHI for that market is 4,125, indicative of a highly concentrated market.[9] Each of these facilities is capable of clearing undiluted SJVH, either by piping it to the Bay Area refineries (the Pipeline) or to Los Angeles refineries (the ExxonMobil pipeline) or by refining it locally (the San Joaquin Refinery). No other existing pipelines can transport undiluted SJVH and there is no other currently operating local refinery. We concur with Cox's definition of the origin market.

Second, Cox faulted Webb for failing to use the Department of Justice/Federal Trade Commission Horizontal Merger Guidelines (Merger

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[7] *SP-2C, Webb Rebuttal* at 4-14.

[8] *Ibid.*, at 47.

[9] *Chevron Exhibit 51,Prepared Direct Testimony of Alan J. Cox, Ph.D. regarding Shell Pipeline's Market Power on behalf of Chevron Products Company*, Exhibit 6.

Guidelines) to assess Applicant's market power. Cox correctly observes that the Commission routinely uses the Merger Guidelines for this purpose and that Webb's claim that they cannot be applied to analyze the market power of a regulated entity is mistaken. The methodology of the Merger Guidelines is to assume that a market participant raises its prices by 15% over an assumed competitive price and then calculate how much business it would have to lose in order to bring its income after the price increase back to the pre-price-increase level. In the case of the Pipeline, the relevant calculation is how many bpd independent shippers would have to divert from the Pipeline in order to render a 15% transportation price increase over an assumed competitive price of $1.69 valueless to SPBPC. Based on an analysis of the Pipeline's marginal cost, Cox concluded that independent shippers would need to shift approximately 11,000 to 11,500 bpd (roughly 20% of total undiluted SJVH shipments on the Pipeline) to frustrate a price increase from $1.69 to $1.94. Independent shippers would have to clear that production via other means for less than the cost of continuing to ship it via the Pipeline at the new price. For reasons outlined in his testimony, Cox concluded that there were no technically and economically available means of clearing those barrels.[10] In addition, the loss of 20% of SJVH shipments could cause total throughput to fall below the minimum volume required to provide heated service, a possibility that would deter independent shippers from attempting to clear those barrels via other means.[11]

Cox's analysis is supported by the fact that Applicant was able to raise its Pipeline transportation price from $1.09 per barrel to $1.90 per barrel over a

[10] *Ibid.,* at 29-55.

two year period without suffering any related reduction in shipments nominated by independent shippers. Real world experience conformed to the theoretical model.

Cox testified that Applicant also demonstrates its market power by purchasing crude at a discount at Coalinga, where it operates the only pipeline available to independent shippers,[12] and by offering its affiliate STUSCO more favorable transportation terms than it offers to independent shippers.[13] These facts were essentially undisputed. Webb admitted, in his testimony, that if Applicant were able to extract a price concession from shippers, it would be evidence of market power.[14]

We concur that (a) it is appropriate to use assumed price increase methodology of the Merger Guidelines to assess the Pipeline's market power and (b) applying those guidelines to the facts in this case, independent shippers would have to find a cost-competitive way to clear 11,000 to 11,500 bpd of SJVH in order to defeat the assumed price increase. Applicant's burden is to demonstrate that there is a cost-effective way to clear those barrels. Applicant failed to meet that burden.

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[11] *Ibid.,* at.33-34.

[12] *Chevron 51, Cox Direct*, Exhibits 5e(1), 5f a d 5j.

[13] *Chevron 5C.*

[14] *Transcript,* at 43.

Applicant argues that independent shippers could clear the necessary quantities of SJVH by a variety of means including shipping via heated pipeline to the Los Angeles market; shipping via truck or unit train; refining the oil at a presently abandoned refinery; and blending the SJVH to make it viscous enough to ship through unheated pipelines. In order for any of these alternatives to be economically feasible, the associated transportation cost would have to be less than $1.94 per barrel (assumed competitive price of $1.69[15] times 115% = $1.94). After evaluating the cost of other pipelines, trucks, rail and refineries located in the San Joaquin Valley, Cox found that only the San Joaquin Refinery in Bakersfield and the proprietary ExxonMobil pipeline could clear any of the SJVH currently shipped via the Pipeline for less than $1.94 per barrel. Clearing SJVH by any other alternative means would add more than $1.94 per barrel in transportation costs and hence would not defeat a price increase of that magnitude by Applicant.[16]

Some production could theoretically be cleared at less than the $1.94 rate either by shipping it to Los Angeles via the proprietary ExxonMobil pipeline or by trucking it to the San Joaquin refinery. However, as Cox points out,

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[15] Cox uses the $1.69 price arrived at in the most recent arbitration between Applicant and Independent Shippers as the assumed competitive price, even though, according to his analysis, (a) the Pipeline's marginal cost of moving a barrel of oil from the producing fields to the Bay Area is $0.68 and (b) other pipelines charge prices in the range of $1.00/barrel to transport crude from the San Joaquin Valley to southern California refineries. Thus, the $1.69 price is probably super-competitive.

[16] *Chevron 51, Cox Direct,* Exhibit 5a, calculates the transportation cost for moving SJVH from each of the producing fields either to Los Angeles refineries or to Bay Area refineries by truck, rail or other pipeline. In each case, the cost exceeds the $1.94 supra-competitive price resulting from application of the Merger Guidelines methodology.

ExxonMobil is the only party authorized to ship oil on the ExxonMobil pipeline, making its availability dependent on the price ExxonMobil is willing to pay for SJVH. In addition, even if ExxonMobil were willing to make the pipeline available while paying a market price for SJVH produced by others, shipment on that pipeline would still be uneconomical for crude originating at Station 36 or Coalinga due to the cost of trucking crude from those locations to the pipeline.[17]

The San Joaquin Refinery is the only one of the three refineries in the San Joaquin Valley that currently processes SJVH. The Kern Oil refinery is configured to process crude with an API gravity of 29, far lighter than SJVH, and it could not process SJVH without making major capital investments.[18] The Big West refinery is shut down and its owners have announced that it will not process crude in the future.[19] Although the San Joaquin Refinery is physically capable of processing SJVH, it is currently a net seller of crude and has no need to purchase additional crude.[20]

Finally, Cox points out that diverting 11 to 12 thousand barrels a day from the Pipeline would potentially cause nominations to fall below the minimum quantity necessary to operate the Pipeline as a heated oil facility, thus shutting it down and depriving independent shippers entirely of pipeline access to the Bay Area refineries.[21]

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[17] *Ibid., at. 50.*

[18] *Chevron Exhibit 54, Direct Testimony of Richard Kent*, at 4-5.

[19] *Chevron Exhibits 9-11; Transcript at 168-69.*

[20] *Chevron 54, Kent Direct*, at 8.

[21] *Chevron 51, Cox Direct*, at 54.

For all these reasons, Cox concludes that SPBPC possesses significant market power. His analysis is supported by the undisputed fact that SPBPC has been able to raise transportation rates from $1.09 per barrel to $1.90 per barrel in two years without losing any significant volume in shipments from independent producers in that period. The most likely explanation for this fact is that SPBPC possesses market power.[22]

Webb argues that there is an alternate explanation for the ability of Applicant to raise its prices without losing business. According to Webb, the competitive transportation price for SJVH delivered to the refinery gates in the Bay Area is $2.70 per barrel.[23] On that assumption, Applicant can charge any price below $2.70 without losing business to alternate means of clearing the SJVH production.

The difficulty with this line of argument is that it fails to explain why the Pipeline's owners would choose to charge a significantly below-market price. Webb offered a weak justification when asked about this on cross-examination:

> Q: To use the vernacular, Shell is leaving a lot of money on the table, is that right?
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> A: I really can't come to that conclusion because you have to look at the risk that they lose Tesoro as a customer. So this piece of data that we got suggests that they could have raised the rate up to $2.69. In my opinion that would be a very risky move for Shell because if they got it wrong, they would lose 40,000 barrels a day at $2 a barrel, so rough numbers that is $80,000 a day forever…[24]

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[22] *Ibid.*, at 60-61.

[23] *SP 2C, Webb Rebuttal*, at 47.

[24] *Transcript* Vol. 1, at 98-99.

This response assumes that Tesoro has technically and economically feasible alternative means of obtaining 40,000 bpd of SJVH but, as Cox's analysis demonstrates, Tesoro has no such alternatives available to it.

When asked a few moments later by the Administrative Law Judge why Applicant would not charge *some* rate between $1.90 and $2.70, Webb replied that the return on investment might be unreasonable at the higher rate.[25] Given that a competitive rate is presumptively reasonable, finding that a rate below $2.70 is unreasonable is equivalent to finding that the $2.70 rate is non-competitive.

In addition, Webb appears to have made an error in calculating his $2.70 "competitive rate." To calculate this rate, Webb added together three contract elements in crude sales contracts that he reviewed: the location differential (the transportation charge), the pipeline loss allowance (a reduction in the transportation charge to reflect leakage and evaporation during transit from the oil field to the refinery) and the market price adjustment (an addition to or subtraction from the posted price of crude.)[26] Webb treated the market price adjustment as an addition to the transportation charge. But the market price adjustment is an adjustment of the posted crude price "at the lease" (the point of production), not an adjustment of the transportation charge.[27]

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[25] *Ibid*., at 201-205.

[26] SP2C, *Webb Rebuttal*, p. 15; see also *Transcript* at 102 ff.

[27] See *Chevron Exhibit 42*, *Crude Sales Contract between Chevron and STUSCO.* This sales contract contains an 80 cent "market price adjustment" for a sale at the lease, i.e., a sale with no transportation charge.

Finally, with regard to Applicant's attempt to fit this situation within the parameters of the Unocap test, the foregoing discussion establishes that Applicant fails at least three of the elements of the Unocap test: it does not face significant actual or potential competition and it charges rates significantly in excess of those charged by competing pipeline operators.

In summary, then:

(a) The origin market for transporting undiluted heavy crude oil out of the San Joaquin Valley is highly concentrated;

(b) It is appropriate to test Applicant's market power by applying the methodology of the Merger Guidelines;

(c) As measured by the Merger Guidelines methodology, Applicant possesses significant market power in the transportation of undiluted heavy crude oil from the San Joaquin Valley to the San Francisco Bay Area; and

(d) Applicant's proposed market rates are not justified by application of the Unocap test.

For the reasons given, we find that SPBPC may not charge market-based rates for transporting crude oil on the Pipeline from the San Joaquin Valley to the San Francisco Bay area.

Comments on Proposed Decision

The proposed decision of Administrative Law Judge (ALJ) Bemesderfer in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code, and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments on the proposed decision were received from the Applicant and the independent shippers (Chevron, Tesoro and Valero). Applicant's comments re-argue positions rejected in the proposed decision and are accorded no additional weight. Each of the independent shippers supported the proposed decision and proposed minor additions and

corrections to the Findings of Fact. The Findings of Fact have been modified in response to the changes proposed by the independent shippers.

Assignment of Proceeding

John A. Bohn is the assigned Commissioner and Karl J. Bemesderfer is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. The origin market for the Pipeline consists of the Pipeline, ExxonMobil's proprietary pipeline and the San Joaquin Refinery.
2. The HHI for the origin market is 4,125.
3. Undiluted San Joaquin Valley Heavy crude has an API gravity of 14.
4. The Pipeline is the only pipeline capable of transporting undiluted SJVH from the San Joaquin Valley to the San Francisco Bay area.
5. Trucks, unit trains and water-borne transport are not economically competitive means of transporting undiluted SJVH from the Joaquin Valley to the San Francisco Bay area.
6. The Tesoro and Valero refineries in the San Francisco Bay Area rely on undiluted SJVH to maximize the financial performance of their refinery assets.
7. The Kern Oil refinery is configured to process crude oil with an API gravity of 29 and cannot process SJVH without making major capital investments.
8. The Big West refinery is shut down and its owners have announced that it will not process crude oil in the future.
9. The San Joaquin Refinery is currently a net seller of crude oil and has no need to purchase additional crude oil.
10. The proprietary ExxonMobil pipeline from the San Joaquin Valley to the Los Angeles area is physically capable of transporting undiluted SJVH.

11. Independent shippers have no right to nominate shipments on the ExxonMobil pipeline.

12. SJVH may be blended with lighter crude oils to produce a mixture (SJV Blend) that is capable of being transported in unheated pipelines.

13. Even if the SJVH currently transported on the Pipeline could be delivered as part of SJV Blend, the Tesoro and Valero Bay Area refineries could not process SJV Blend without making major capital investments.

14. Alternative modes of transporting undiluted SJVH to the San Francisco Bay Area (such as trucking, rail and water-borne deliveries) create a higher relative risk to both transportation and public safety than transportation of such crude oil on the Pipeline.

15. The Pipeline's affiliate STUSCO is able to purchase SJVH at a discount at Coalinga.

16. The Pipeline is the only heated pipeline available to shippers at Coalinga.

17. The heavy crude oil delivered by the Pipeline to the Bay Area refineries includes a small amount of Outer Continental Shelf (OCS) crude oil that has been blended with SJVH.

18. OCS commands a lower market price than SJVH.

19. When OCS is blended with SJVH it is "re-graded" and sold to independent shippers at the higher price of SJVH.

20. The Pipeline charges STUSCO a lower transportation loss allowance than it charges independent shippers.

21. The Pipeline has raised the price of transporting undiluted SJVH from the San Joaquin Valley to the San Francisco Bay area from $1.09 per barrel to $1.90 per barrel without losing any significant business from independent shippers.

22. The Pipeline exercises significant market power over independent shippers of undiluted SJVH from the San Joaquin Valley to the San Francisco Bay area.

Conclusion of Law

SPBPC's application to charge market-based rates for transporting crude oil from the San Joaquin Valley to the Bay Area refineries should be denied.

INTERIM ORDER

IT IS ORDERED that the application of San Pablo Bay Pipeline Corporation to charge market-based rates for the transportation of crude oil on its heated pipeline between the San Joaquin Valley and the San Francisco Bay area is denied.

This order is effective today.

Dated November 19, 2010, at San Francisco, California.

MICHAEL R. PEEVEY
President
DIAN M. GRUENEICH
JOHN A. BOHN
TIMOTHY ALAN SIMON
NANCY E. RYAN
Commissioners