United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued March 17, 2016 Decided August 30, 2016

No. 15-1009

PETRO STAR INC.,
PETITIONER

v.

FEDERAL ENERGY REGULATORY COMMISSION AND UNITED STATES OF AMERICA,
RESPONDENTS

STATE OF ALASKA, ET AL.,
INTERVENORS

On Petition for Review of Orders of the
Federal Energy Regulatory Commission

Eric F. Citron argued the cause for petitioner. With him on the briefs was *Thomas C. Goldstein*. *Michael Diamond*, *Jonathan D. Simon*, *Angela K. Speight*, and *Lawrence G. Acker* entered appearances.

Bradley S. Lui, *Joseph R. Palmore*, *Marc A. Hearron*, and *Craig W. Richards*, Attorney General, Office of the Attorney General for the State of Alaska, were on the briefs for intervenor State of Alaska in support of petitioner.

Susanna Y. Chu, Attorney, Federal Energy Regulatory Commission, argued the cause for respondents. With her on the brief were *William J. Baer*, Assistant Attorney General, *Robert B. Nicholson* and *Robert J. Wiggers*, Attorneys, and *Robert H. Solomon*, Solicitor, Federal Energy Regulatory Commission.

James F. Bendernagel, Jr. argued the cause for intervenors. With him on the brief were *Eugene R. Elrod*, *Robin O. Brena*, *Kelly M. Helmbrecht*, *Jeffrey G. DiSciullo*, *Andrew T. Swers*, *Matthew W.S. Estes*, *John A. Donovan*, *Glenn S. Benson*, *Barbara S. Jost*, *Dean H. Lefler*, and *Deborah R. Repman*.

Before: TATEL and SRINIVASAN, *Circuit Judges*, and EDWARDS, *Senior Circuit Judge*.

Opinion for the Court filed by *Circuit Judge* SRINIVASAN.

SRINIVASAN, *Circuit Judge*: The Trans Alaska Pipeline System is the sole means of transporting oil from Alaska's North Slope to the shipping terminal at Valdez, Alaska, roughly 800 miles to the south. Oil companies deposit crude oil extracted from their fields on the North Slope into the pipeline at its northern point. Although the companies' crude oil deposits differ in ways that affect their respective market values, the deposits necessarily become commingled in the pipeline. At the southern end of the pipeline in Valdez, the oil companies receive the same proportion of oil they initially contributed to the common stream. Because of the commingling, however, the companies generally will not receive the same quality of oil at Valdez that they initially delivered into the pipeline at the North Slope.

Absent monetary adjustments to compensate for the difference in quality between inputs and outputs, companies depositing relatively higher-value crude oil into the pipeline would unfairly suffer a financial loss, while those depositing lower-value crudes would secure a financial windfall. To avoid that result, the Federal Energy Regulatory Commission oversees a mechanism for calibrating payments known as the Quality Bank. The Quality Bank assigns each company's crude oil a value based on the quality of its components or "cuts."

This case concerns the formula used to value one of those cuts, called Resid. In 2013, the Commission initiated an investigation into Resid pricing. During this investigation, Petro Star argued that the Quality Bank methodology undervalues Resid in an unjust and unreasonable manner. The Commission rejected Petro Star's argument and declined to change the Resid valuation formula.

We conclude that the Commission failed to respond meaningfully to evidence presented by Petro Star, rendering its decision arbitrary and capricious, and that Petro Star's purported failure to provide a viable methodology does not provide an independent ground for the Commission's decision. We thus grant the petition for review and remand for the Commission to reconsider the methodology used to value Resid or to provide a more reasoned explanation for its approach. We also find that Alaska lacks standing to intervene in this matter.

I.

A.

Since 1984, the Federal Energy Regulatory Commission (FERC) has relied upon the Quality Bank to calculate monetary adjustments between oil companies that use the Trans Alaska Pipeline System (TAPS) to transport oil in a commingled stream. *See Trans Alaska Pipeline System,* 29 FERC ¶ 61,123 (1984). The Quality Bank "charges shippers of relatively low-quality petroleum who benefit from commingling and distributes the proceeds to shippers of higher quality petroleum whose product is degraded by commingling." *OXY USA, Inc. v. FERC*, 6 F.3d 679, 684-85 (D.C. Cir. 1995). The Quality Bank is thus a zero-sum transfer mechanism: the goal is to "place each [company] in the same economic position it would enjoy if it received the same petroleum at Valdez that it delivered to [the pipeline] on the North Slope." *Id.*

Since 1993, the Quality Bank has used the "distillation method" to calculate the monetary adjustments. *See Trans Alaska Pipeline System*, 65 FERC ¶ 61,277, 62,282 (1993). Distillation is the initial step in the oil refining process. It involves the separation of crude oil into different components or "cuts" through heating and boiling. From lightest to heaviest, the nine Quality Bank cuts are: (1) Propane, (2) Isobutane, (3) Normal Butane, (4) Light Straight Run, (5) Naphtha, (6) Light Distillate, (7) Heavy Distillate, (8) Vacuum Gas Oil, and (9) Resid. The heavier cuts at the end of the list are of lower quality.

The Quality Bank assigns a value to each of the nine distillation cuts and determines how much of each cut makes up the crude oil streams deposited by an oil company into the

TAPS. It then calculates the value of each company's crude oil contribution based on the volume-weighted value of its component cuts. The same formula determines the value of the commingled common stream.

Before calibrating payments, the Quality Bank must also account for another variable (in addition to commingling): the impact of refineries connected to the pipeline along the route to Valdez. Those refineries divert portions of the common stream, refining the oil for their own purposes and processing other petroleum products out of the stream. The refiners then return the remaining, unused oil to the pipeline. Because the oil returned generally contains a higher percentage of lower-quality cuts (like Resid) than the common stream withdrawn by the refiners, the refining process reduces the value of the common stream.

Accordingly, at Valdez, the Quality Bank again calculates the value of the common stream. Oil companies make payments into or receive payments from the Quality Bank based on the difference in value between the oil they deliver into the pipeline and the common stream they ultimately receive at Valdez. In order to account for the impact of the refiners, the Quality Bank "compares the value of the diverted portion of the common stream to that of the [refinery] return stream, charging the refiners and compensating other [companies] for the reduction in the common stream's value caused by the removal of the refinery products." *OXY*, 64 F.3d at 685. In keeping with the zero-sum methodology, the charge paid by refiners is distributed to oil companies who receive lower-quality oil at Valdez than that which they initially contributed.

B.

Because payments under the Quality Bank scheme are based on the difference in value between different oil streams, the proper functioning of the Quality Bank depends on assigning accurate *relative* values to the nine distillation cuts. "FERC must accurately value all cuts—not merely some or most of them—or it must overvalue or undervalue all cuts to approximately the same degree." *Id.* at 693.

Under its current approach, the Quality Bank aims to achieve that goal by assigning a value to each cut reflecting its actual market price as closely as possible. Six of the cuts can be sold following distillation without any additional processing, and they thus have published market prices. The Quality Bank uses those prices to value the six "marketable" cuts. The published market prices for those six cuts are assumed to include the refining cost of producing the cut—i.e., distilling the individual cut out of commingled oil.

The remaining three cuts—Light Distillate, Heavy Distillate, and Resid—cannot be sold without additional processing following distillation. Those "pre-market" cuts thus have no published market prices. The current Quality Bank methodology requires the Commission to set a value for pre-market cuts, like marketable cuts, after simple distillation but prior to any further processing. *See id.* at 694. Because there is no market for those three cuts without additional processing, however, there are no published market prices. In order to determine the hypothetical market price of those cuts, the Quality Bank starts with the published market prices for finished products that could be developed from the pre-market cuts with additional refining. It then ascertains the value of the pre-market cuts by deducting the additional processing costs required to produce the finished products.

Determining the amount of the deduction requires estimating the costs associated with operating a hypothetical refinery.

As relevant here, Resid, with additional refining, can be developed into "coke," which has a published market price. Under the current Quality Bank methodology, Resid's value equals the market price of coke minus the processing cost required to convert Resid into coke. In other words, "Resid's value is the value of the products from the coking less the cost of the apparatus and material used in coking." *Order on Initial Decision and Request for Rehearing*, 149 FERC ¶ 61,149, at ¶ 4 (2014) ("*Order*").

Of particular significance, the cost deduction for Resid includes a 20% capital recovery factor (also referred to as a capital investment allowance). The capital recovery factor accounts for the capital investment that would be required to build a hypothetical refinery capable of processing the pre-market cut into a marketable product, i.e., coke. By increasing the estimated processing costs of coking, the capital recovery factor has the effect of reducing the Quality Bank valuation of Resid. The Quality Bank methodology also includes a similar 20% capital recovery factor in valuing the other pre-market cuts, Light Distillate and Heavy Distillate. (Coking facilities are specific to Resid processing, but analogous refineries process Light and Heavy Distillate into their respective finished products.)

This case presents a challenge to the Quality Bank's valuation formula for Resid. The current formula was adopted in a 2004 agency hearing. *Trans Alaska Pipeline Sys.*, 108 FERC ¶ 63,030 (2004). The Commission affirmed the Administrative Law Judge's decision, 113 FERC ¶ 61,062 (2005), and this court upheld the Commission's Order in its

entirety, *Petro Star, Inc. v. FERC*, 268 F. App'x 7 (D.C. Cir. 2008).

C.

Flint Hills Resources Alaska (Flint Hills) operated a refinery along the TAPS pipeline. Flint Hills diverted the common stream for use in its facility, returned an oil stream to the pipeline that included a greater proportion of Resid, and made payments into the Quality Bank. The greater the value of Resid, the more credit Flint Hills would receive for the oil it returned to the pipeline, and the lower its payments would be. Resid's valuation therefore was a particular concern for Flint Hills.

In August 2013, Flint Hills brought a complaint to the Commission under the Interstate Commerce Act, 49 U.S.C. App. § 15(1) (1988), questioning whether the Quality Bank valuation method remained "just and reasonable," as required by the Act. Flint Hills suggested that, as a result of the capital recovery factor included in Resid's processing cost adjustment, the Quality Bank undervalued Resid relative to the other cuts.

The Commission decided that the complaint should be dismissed on timeliness grounds. But it initiated its own investigation into the Quality Bank methodology, explaining that "a sufficient showing has been made as to whether the existing Q[uality] B[ank] formula is just and reasonable insofar as it values Resid" and that the "Commission is not barred from seeking to determine whether a rate is no longer just and reasonable no matter how long [ago] it may have become unjust and unreasonable." *Order Dismissing Complaint, Initiating an Investigation and Establishing Hearing*, 145 FERC ¶ 61,117, 61,620 ¶ 47 (2013). The

investigation focused on "the lawfulness of the existing Quality Bank methodology"—particularly, its "valuation of Resid." *Id.* at 15.

FERC set the matter for a hearing before an administrative law judge (ALJ). Petro Star, another refiner along the TAPS, intervened in the proceeding to support Flint Hills' position that the Quality Bank formula undervalued Resid. Petro Star and Flint Hills argued for removing the 20% capital investment allowance from the Quality Bank's formula for Resid. In their view, the capital allowance resulted in a valuation incommensurate with the prices of the six marketable cuts. Several major oil companies intervened in the proceeding to argue in favor of maintaining the existing formula.

The ALJ rejected Flint Hills' and Petro Star's argument for two independent reasons: (i) they had failed to propose a just and reasonable alternative to the existing Quality Bank method, and (ii) they had failed to demonstrate that it was unjust and unreasonable to include a capital investment allowance in Resid's processing cost adjustment. *See Initial Decision*, 147 FERC ¶ 63,008 (2014) (*Initial Decision*). Petro Star filed exceptions to both parts of the ALJ's decision. The Commission affirmed the ALJ's decision in its entirety, and Petro Star filed a timely petition for review. Flint Hills had terminated operations at its North Pole refinery by that time, so it does not join the appeal.

II.

Section 15(1) of the Interstate Commerce Act authorizes FERC to prescribe just and reasonable rates if it finds, after a hearing, that existing rates are unjust or unreasonable. 49 U.S.C. App. § 15(1) (1988). We review the Commission's

determination in order to assess whether it is "arbitrary, capricious . . . or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). When, as here, the Commission's analysis "requires a high level of technical expertise," we "must defer to the informed discretion of the responsible federal agencies." *Exxon Co., USA v. FERC*, 182 F.3d 30, 37 (D.C. Cir. 1999) (quoting *Marsh v. Or. Nat'l Res. Council*, 490 U.S. 360, 377 (1989)). In all events, however, "we require the Commission to engage in rational decisionmaking." *OXY*, 64 F.3d at 690.

In prior cases, that requirement has prompted remands from our court instructing the Commission to reconsider its valuation of particular cuts or to provide a more detailed justification for its existing approach. *See Tesoro Alaska Petroleum Co. v. FERC*, 234 F.3d 1286, 1294 (D.C. Cir. 2000); *Exxon*, 182 F.3d at 34; *OXY*, 64 F.3d at 701. Most recently, in *Tesoro*, Exxon and Tesoro filed complaints challenging aspects of the prevailing formula. The Commission dismissed those complaints, finding that they did not establish "changed circumstances" and that reexamination of the Quality Bank methodology therefore was unnecessary. 234 F.3d at 1289. We reversed and remanded the case for the Commission to reconsider the contested formulas or explain why it need not do so.

We relied on the understanding that a "rate order must be modified where 'new evidence warrants the change.'" *Id*. at 1288 (quoting *Tagg Bros. & Moorhead v. United States*, 280 U.S. 420, 445 (1930)). Both parties had "offered evidence that [wa]s new in relation to what was before the Commission in its earlier determinations and sufficiently compelling to require reconsideration of the earlier resolution." *Id*. In such circumstances, we concluded, the "Commission's failure to respond meaningfully to the evidence renders its decisions

arbitrary and capricious." *Id.* at 1294. "Unless an agency answers objections that on their face appear legitimate, its decision can hardly be said to be reasoned." *Id*.

We reach the same result here. In doing so, we note that the parties dispute *Tesoro*'s applicability in this context in one respect. *Tesoro* requires that the Commission respond meaningfully only to "new evidence" in evaluating whether its methodology continues to be just and reasonable. *Id.* at 1288. The Commission adopted that requirement in the Order. *Order* ¶¶ 57-59. Petro Star argues that such a limitation has no place where, as here, the Commission has itself initiated the investigation. In that circumstance, Petro Star contends, the Commission should be required to evaluate its methodology in light of *all* of the evidence before it, regardless of whether that evidence is new. We need not resolve that dispute in this case, because we find that even if *Tesoro*'s new-evidence requirement does apply, Petro Star has offered indisputably new evidence in support of its argument that the Quality Bank methodology for Resid valuation is unjust and unreasonable.

Petro Star's claim that the Quality Bank methodology's inclusion of a capital recovery factor results in undervaluation of Resid relative to the other cuts is rooted in theoretical economic principles. Petro Star contends that the published market prices for the six marketable cuts are short-run, spot-market prices that do not reflect long-run considerations such as capital investment returns, which are regarded as sunk costs. By contrast, the Quality Bank calculates the post-distillation value of Resid based on a capital investment allowance that assumes a long-term return of 20% on capital. According to Petro Star, Resid's valuation thus is incommensurate with the valuation of the six marketable cuts, infringing the essential requirement that the Quality Bank

"assign accurate relative values" to the cuts. *OXY*, 64 F.3d at 693.

We conclude that Petro Star "establish[ed] a prima facie case that new evidence warrants re-examination" of the Quality Bank formula used to value Resid. *Tesoro*, 234 F.3d at 1293. Accordingly, the Commission was obligated to offer a meaningful response to Petro Star's arguments. It failed to do so. And although we may affirm on the basis of an ALJ's reasoning when the agency adopts his or her decision (as the Commission did here), *see Cities of Bethany v. FERC*, 727 F.2d 1131, 1144 (D.C. Cir. 1984), the ALJ also failed to provide a sufficient response to Petro Star's arguments. We thus find that the Commission's decision was arbitrary and capricious.

Of course, the Commission might reasonably find on remand that the existing formula used to value Resid continues to be just and reasonable, such that Petro Star's claim will ultimately fall short. But Petro Star has raised a facially legitimate objection to the inclusion of the capital recovery factor in the Quality Bank's processing cost adjustment for Resid. In response, the Commission must either answer that objection or change its formula.

A.

We first consider the "less-than-a-barrel" anomaly Petro Star identifies, which served as the initial impetus for the proceedings below. Petro Star argues that the Commission failed to provide a meaningful explanation for how the Quality Bank methodology can function correctly in light of that purported anomaly. We agree.

The anomaly is premised on the theory that the sum of the value assigned to each cut under the Quality Bank methodology should exceed (or at least equal) the real-world market price for a barrel of Alaska North Slope (ANS) crude. That is because the Quality Bank, under its current approach, seeks to assign each cut a value reflecting its market price. The sum of the Quality Bank price for all nine cuts, Petro Star contends, thus should approximate the market price for a barrel of crude oil *plus* the added value of distillation.

That result in fact prevailed from the time of the current Resid formula's adoption in 2005 to 2008. From 2009 to 2012, however, the relationship reversed. During that period, the market price for a barrel of ANS crude exceeded the calculated Quality Bank barrel price based on the assigned value of the nine cuts. *See* Revised Prepared Direct Testimony of Philip K. Verleger, Jr. at 28-29 (Feb. 14, 2014) (J.A. 210-11) ("Verleger Testimony").

Petro Star argues that the reversal reveals a flaw in the Quality Bank methodology—specifically, its calculation of the hypothetical market price of Resid. Because the value of the six marketable cuts reflects published market prices, the Quality Bank's valuation of those cuts is necessarily correct. Any flaw in the methodology therefore must come from the valuation of the three pre-market cuts, for which the Quality Bank estimates hypothetical market prices. Of those three cuts, the refining costs for Resid substantially exceed those for Light and Heavy Distillate. On that basis, Petro Star claims that the most likely explanation for the anomaly is an error in the Quality Bank formula for Resid, which results in its systematic undervaluation.

In light of Petro Star's showing concerning the purported less-than-a-barrel anomaly, we conclude that Petro Star offers

"sufficiently compelling" evidence that warrants a reasoned response. *Tesoro*, 234 F.3d at 1288. The Commission's decision, however, does not address the alleged anomaly. Assuming, as we must, that the Commission found Petro Star's argument about the anomaly unpersuasive, there is no explanation for wholly disregarding it. The Commission described the ALJ's discussion of the issue, but did not expressly endorse it or otherwise give any opinion on the merits. *See Order* ¶ 74. Even assuming that the Commission's silence amounted to an implicit affirmation of the ALJ's analysis in light of its ultimate decision on the matter, the ALJ's opinion also gave no adequate response to Petro Star's argument.

The ALJ asserted that the premise of Petro Star's theory—i.e., "that the composite value of the Quality Bank cuts always should exceed the . . . published price for ANS common stream crude oil"—is "simply wrong." *Initial Decision* ¶ 136. That may (or may not) be true, but the ALJ's explanation falls short regardless. The ALJ stated that the "QB methodology's objective is to assign accurate *relative values* among the various Quality Bank cuts/ANS crude oil streams," not "to determine the *actual market values* of the cuts or streams for comparison purposes." *Id.* ¶ 137. Because the expert testimony about the anomaly rested on the assumption that the Quality Bank cut values reflected actual market prices, the ALJ rejected the expert's reasoning as "unsound" and dismissed the anomaly as insignificant. *Id*.

That analysis suffers from an important defect. The ALJ was correct that the Quality Bank cut valuations do not *necessarily* have to reflect market prices. After all, the "goal of the Quality Bank methodology . . . is to assign accurate *relative* values to the petroleum that is delivered to TAPS." *OXY*, 64 F.3d at 693 (emphasis added). Under its current

approach, however, FERC has *chosen* to achieve that goal by assigning values to each cut reflecting their actual market price as closely as possible. As we have described, the Quality Bank derives values for the six marketable cuts entirely from their published market prices, and the formulas for the pre-market cuts similarly aim to reflect their post-distillation value in market-price terms. *See id.* at 694; *see also Exxon*, 182 F.3d at 42. Because the Quality Bank methodology—as constructed—seeks to mirror market prices, the ALJ failed to give a reasoned response in dismissing the anomaly on the ostensible ground that the Quality Bank composite cut valuation and the ANS barrel market price "have no meaningful connection for Quality Bank valuation purposes." *Initial Decision* ¶ 137.

That explanation, moreover, stands in tension with other parts of the ALJ's Initial Decision. Elsewhere, the decision reflects the understanding that market prices substantiate the accuracy of Quality Bank valuations. For instance, the ALJ agreed with Petro Star that, if the evidence demonstrated that "Resid has a higher market value (vis-à-vis its coker feedstock Quality Bank valuation) as an FO-380 blendstock," that would suggest undervaluation of Resid. *Id.* ¶ 140. That acknowledgement rests on the notion that market prices inform Quality Bank valuations. Whether Resid's market value as a blendstock exceeded its value as coker feedstock would be irrelevant if the two figures were truly independent, as the ALJ asserted in dismissing the less-than-a-barrel anomaly.

Of course, Petro Star's theory concerning the anomaly assumes that the distillation process adds enough value such that the composite value of the nine Quality Bank cuts must always exceed the price of a barrel of ANS crude oil. That premise may be oversimplified or incorrect. For instance, if

some of the post-distillation cuts (such as Resid) effectively have no value until converted into marketable products through further refining, distillation, in isolation, could actually reduce the value of the barrel, because the process of distillation necessarily involves expenditures—e.g., the costs associated with construction and operation of the distillation machinery. Those costs may not be recovered when distillation produces, in part, a cut requiring additional refining more costly than its ultimate value. That could potentially result in a Quality Bank composite value lower than the ANS crude barrel price.

But we cannot discern any such explanation in the ALJ's Initial Decision. The statements that come closest are the ALJ's observations that the "Quality Bank composite cut valuation is based on simple distillation," *id.* ¶ 136, and that the "record indicates there are no simple distillation refineries operating on the U.S. West Coast," *id.* ¶ 136 n.71. The latter statement includes a citation to the testimony of an expert witness for Exxon. The expert noted that, "[a]lthough presumably distillation normally adds value, there are no distillation refineries operating on the West Coast—presumably because simple distillation refineries cannot, without further refining, cover the costs of distillation." Prepared Testimony of Michael C. Keeley, Ph.D at 20 (Feb. 21, 2014) (J.A. 87). But neither the ALJ nor the Commission adopted or expanded upon that reasoning in its response to the purported anomaly. In light of that silence, we find no sufficient answer to Petro Star's argument that the formula for Resid valuation is flawed because the composite value of the Quality Bank cuts should exceed the market price of an ANS barrel.

On appeal, the Commission argues that, regardless of the significance of the less-than-a-barrel anomaly, the

Commission acted reasonably in declining to eliminate the capital recovery factor from the Resid valuation based on temporary market conditions. It is true that the anomaly lasted for less than three years (based on the record before us). *See Initial Decision* ¶ 137 & n.73. But whatever the merits of the Commission's argument that the anomaly was merely a temporary phenomenon reflecting no underlying methodological flaw, the Commission did not offer that rationale in the proceedings below. The Commission therefore cannot rely on it here. *See Chenery Corp. v. SEC*, 318 U.S. 80, 95 (1943). We thus conclude that the Commission failed to respond meaningfully to Petro Star's argument and evidence about the less-than-a-barrel anomaly. *See Tesoro*, 234 F.3d at 1294.

B.

We next consider information offered by Petro Star about recent conditions in the West Coast coking market. Petro Star's argument for excluding the capital investment allowance from the Resid valuation formula rests on the theory that short-run, spot-market prices for Quality Bank cuts do not reflect capital investment returns, which instead are considered sunk costs and are ignored in purchasing decisions. In addition to the less-than-a-barrel anomaly, Petro Star presents several items of evidence about the West Coast coking market aimed to show that its theory is in fact borne out in the real world.

According to Petro Star, its evidence demonstrates that "permanent market changes" brought about by the 2008 recession have "compel[led] West Coast refiners to abandon any reasonable expectation they ever again will realize capital investment returns on their cokers." *Initial Decision* ¶ 143. Petro Star contends that conditions in the West Coast coking

market, at least since 2009, reveal that cokers do not in fact reap consistent 20% returns on capital, and thus that coke prices in reality do not include capital recovery costs. If so, the Quality Bank formula undervalues Resid by nonetheless subtracting those costs as part of its processing adjustment. Although the Commission made some effort to respond to those arguments, we find that the responses failed sufficiently to address Petro Star's evidence.

First, Petro Star presents evidence that there has been effectively no investment in new coking capacity on the West Coast in recent years and that new coking projects have been cancelled because they no longer meet rate-of-return goals. *See* Verleger Testimony at 61-63 (J.A. 223-25); *see also* J.A. 199. The Commission affirmed the ALJ's finding that "the record contradicts the claim that there has been no significant new investment in West Coast coking capacity," but provided no additional thoughts on the issue. *Order* ¶ 78. That is inadequate.

Petro Star argues that there has been no new coker investment on the West Coast in particular—where cuts derived from an ANS barrel are actually used and where market conditions thus would best inform the valuation of Resid. The ALJ, however, seemingly ignored that specification. He concluded that the record contradicts Petro Star's claim on the basis of witness testimony focused on coker investment elsewhere in the country. Of the eight new coker projects mentioned in the testimony, only one is on the West Coast. *See* Revised Answering Testimony of John B. O'Brien at 42-44 (Feb. 3, 2014) (J.A. 171-73); *see also* J.A. 183. The Commission noted that Petro Star had filed exceptions disputing the ALJ's finding on that basis. *Order* ¶ 79. But it failed to rebut that point or explain why it might be immaterial.

Second, Petro Star offers evidence that existing coking facilities have been sold at depressed prices, hundreds of millions of dollars below what would be expected if the 20% capital returns assumed by the Quality Bank were possible. *See* Verleger Testimony at 63-65 (J.A. 225-27). Neither the Commission nor the ALJ directly addressed the evidence concerning depressed refining asset values. The Commission did, however, express disagreement with the inference Petro Star seeks to draw from that evidence—i.e., that coking facilities are no longer profitable. The Commission explained that the "record confirms that refiners still receive significant margins for investment in new coker facilities" and observed generally that the "evidence does not demonstrate that refiners have abandoned any expectation of return on or of investment from cokers." *Order* ¶ 80.

But the ALJ's findings supporting those conclusions, which the Commission summarily affirmed, suffer from an important shortcoming. The ALJ explained that the "record establishes that while U.S. West Coast coking margins varied widely over the period from 2004 through 2013, they were never negative." *Initial Decision* ¶ 144. His conclusion rested upon data showing that coking refiners earned $8-$15 above operating costs per barrel over the past few years. *See* Revised Answering Testimony of John B. O'Brien at 38-42 (Feb. 3, 2014) (J.A. 167-71). That data excluded capital costs, however, as Petro Star pointed out in the proceedings below. Brief on Exceptions of Petro Star Inc. (June 9, 2014) (J.A. 508). The profit margins highlighted by the ALJ might still disprove Petro Star's supposition about coker profitability. But the Commission's failure to acknowledge or address the apparent limitations of the data leaves its conclusions largely unsubstantiated. In conjunction with its failure to address directly the most concrete evidence put

forth by Petro Star (the depressed asset prices), its explanation here is, at best, incomplete.

Finally, Petro Star asserts that there is extra refining capacity in existing cokers, i.e., that coker facilities are underutilized. *See* Verleger Testimony at 60 (J.A. 222). If cokers could refine with 20% capital recovery, such gaps would not exist, Petro Star contends. The Commission found that the record contradicted that argument, as "coker facility utilization remains at historic levels." *Order* ¶ 80. On that count, unlike the others, the Commission's answer satisfies the requirement of reasoned decisionmaking. As the ALJ explained, on average, the "U.S. West Coast coker utilization/capacity rates have not fallen materially below . . . the 87% utilization rate adopted in" the prior proceedings. *Initial Decision* ¶ 144. The current utilization rates thus do not suggest that capital recovery has decreased among coker facilities.

On the whole, though, the Commission's analysis nonetheless falls short. Petro Star presents "sufficiently compelling" evidence, based on recent conditions in the West Coast coking market, that refineries no longer expect to recover capital investment returns on cokers and that coke prices thus exclude capital costs. *Tesoro*, 234 F.3d at 1288. Although the Commission made some effort to respond to that evidence, its responses contain marked deficiencies. As a result, we conclude that the Commission failed adequately to address the evidence before it. In doing so, we recognize that there may be evidence in the record or elsewhere contradicting Petro Star's claims about West Coast market conditions or undercutting the inferences Petro Star seeks to draw. But the Commission's decision fails to contain such an explanation.

In support of its claim that refiners valuing oil streams do not factor sunk capital costs into their short-run purchasing decisions, Petro Star additionally points to linear programming models and "Platts net-back yields." Refiners use linear programming models to make crude oil purchasing decisions. The models predict what refiners can earn by refining a given crude oil, using the market prices for the finished products and the *variable* costs of additional, post-distillation processing. Similarly, the net-back yields are designed to reflect the "net-back" that a refiner would earn from processing a particular crude oil. Like the linear programming models, the yield estimates published in Platts—a trade publication relied on by the Quality Bank to price the six marketable cuts—do not account for capital costs associated with processing equipment. Petro Star makes much of the Commission's (and the ALJ's) failure to address the linear programming models and net-back yields.

Insofar as the Commission's silence on those matters may have stemmed from an assumption that they do not constitute "new evidence" which requires a response, *see* Order ¶ 59, we need not delve into the merits of the Commission's understanding of "new evidence" in that regard, as noted earlier. Even assuming that the Commission was obligated to respond only to "new evidence," taking into account all of the evidence presented by Petro Star, we conclude Petro Star "establish[ed] a prima facie case that new evidence warrants re-examination of how [Resid] should be valued." *Tesoro*, 234 F.3d at 1293. On remand, the Commission, in responding to the less-than-a-barrel anomaly and the data from the West Coast coking market, presumably will also address the linear programming models and net-back yields given the intertwined nature of that evidence in the context of Petro Star's argument that Resid's valuation should not include any capital costs deduction.

III.

The Commission maintains that its order rests on another, independent ground: Petro Star was required to propose a just and reasonable alternative methodology, and its suggestion to remove the capital recovery factor from the Quality Bank Resid valuation did not meet that standard. That ground, the Commission contends, suffices to uphold its decision, notwithstanding any deficiencies in its analysis of Petro Star's evidence. We disagree.

We assume without deciding that, under *Tesoro*, Petro Star's alleged failure to offer a viable proposal would obviate the Commission's responsibility to answer Petro Star's objections to the existing methodology. *See Tesoro*, 294 F.3d at 1294; Reply Br. 3. But even if that were the case as a general matter, here, the Commission's basis for rejecting Petro Star's proposal is not "independent" at all. Rather, it rests on an implicit rejection of Petro Star's argument that including a capital recovery factor in the Quality Bank Resid valuation is unjust and unreasonable. That circular rationale fails to satisfy the requirement of reasoned decisionmaking.

The Commission found that Petro Star could not prevail because it had "failed to meet its burden by proposing an inconsistent valuation methodology for Resid." *Order* ¶ 72. The order largely echoed, and then affirmed, the ALJ. *See id.* ¶ 71. The ALJ in turn noted that, for all three pre-market cuts, the Quality Bank's processing cost adjustment includes a capital investment allowance of 20%. *See Initial Decision* ¶ 123 & n.61. According to the ALJ, because Petro Star argues that the capital recovery factor be removed from the Quality Bank Resid formula but not the Light and Heavy Distillate formulas, its suggested approach would create an inconsistency in the valuation of the three pre-market cuts.

More specifically, the "disparity necessarily will overvalue Resid vis-à-vis Light Distillate and Heavy Distillate." *Id.* ¶ 124. That result, the ALJ concluded, was impermissible in light of the requirement that the Quality Bank methodology "assign accurate relative values" to the cuts. *OXY*, 64 F.3d at 693. The Commission echoed that rationale, explaining that "it is the goal of the QB methodology to assign accurate values to the petroleum that is delivered into TAPS, and it must accurately value all cuts to achieve this goal." *Order ¶* 71.

We agree with the Commission that methodological consistency is key in valuing the Quality Bank cuts. But we cannot see how that affords an independent basis for rejecting Petro Star's argument. If Petro Star's theory is correct—that the capital investment allowance makes the formula for valuing Resid incommensurate with the short-run, spot-market prices used to value the six marketable cuts—removing the capital investment allowance from Resid's valuation would *improve* the Quality Bank's methodological consistency by better aligning Resid's valuation with that of the six marketable cuts. Even assuming, as the ALJ does, *see Initial Decision* ¶ 131, that Petro Star's proposal would overvalue Resid relative to Light and Heavy Distillate, the proposal still would *correct* one of the three existing distortions in the Quality Bank methodology. Petro Star emphasized that point to the Commission, explaining that the ALJ's focus on whether the Resid and distillate cuts were valued "in lock-step" reflected "the untenable assumption that three cuts falling short of the *OXY* standard is somehow more acceptable than two." Brief on Exceptions of Petro Star Inc. (June 9, 2014) (J.A. 514-15).

Intervenor Exxon's argument manifests the same defect. Exxon contends that valuing eight of the cuts at the point of

simple distillation, while valuing Resid at a downstream point after additional processing in the refinery (i.e., the coker), would distort the relative cut values under the Quality Bank methodology. But to the extent that Petro Star's theory is correct, removing the capital investment allowance would not result in Resid valuation at a downstream point following additional processing; rather, it would be necessary to determine the hypothetical market price for Resid at the point of simple distillation. In short, the Commission's conclusion that Petro Star's proposal would create a methodological inconsistency follows only if we assume that the capital recovery factor *should* be used to derive an accurate market price for Resid's post-distillation value. Its analysis thus rests on rejecting Petro Star's core contention with respect to the new evidence.

Moreover, the Commission initiated the proceedings below as "an investigation . . . into the lawfulness of the existing Quality Bank methodology"—particularly, its "valuation of Resid." *Order Dismissing Complaint, Initiating an Investigation and Establishing Hearing*, 145 FERC ¶ 61,117, 61,620 (2013). Yet the Commission then faulted Petro Star for failing to propose an alternative that addressed any corresponding deficiencies in the valuation of Light and Heavy Distillate. In doing so, the Commission effectively required Petro Star to address matters outside the scope of its own investigation. The Commission's only explanation—that there is "no merit to the argument that this investigation was limited in scope to the value of Resid without any reference to the interrelation between valuations of other cuts within the common stream"—is plainly inadequate. *Order* ¶ 71. Petro Star has never argued that its Resid proposal should be evaluated without reference to the valuation of other cuts. In fact, the goal of its proposal is to better reflect that interrelationship. The Commission thus offered no answer to

Petro Star's more nuanced argument that the proceeding, and therefore its proposal, was focused on the accuracy of the Resid valuation.

For those reasons, we find that Petro Star's alleged failure to suggest a viable alternative proposal cannot serve as an independent ground for the Commission's decision. It follows that that the Commission must, under *Tesoro*, provide a meaningful response to the new evidence presented by Petro Star.

IV.

Finally, we consider the argument made by the State of Alaska as intervenor. Alaska takes no position on the appropriate formula for Resid valuation, the focus of Petro Star's challenge. Alaska instead seeks to raise an entirely different issue concerning the showing that parties must make when challenging the Quality Bank methodology. Alaska claims that the Commission failed to meaningfully respond to its argument that a party challenging the Quality Bank methodology "should be allowed to suggest an alternative, superior, pro-competitive methodology to replace the existing . . . methodology"—in other words, that a party should not be required to demonstrate that the existing methodology is unjust or unreasonable. Pet. Intervenor Br. 17.

We do not reach the merits of that argument because we conclude that Alaska lacks standing to bring its claim. In order to establish standing, a party must demonstrate that it has suffered an "injury in fact" that is "fairly traceable" to the defendant's action and that can likely be "redressed by a favorable decision." *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560-61 (1992) (quotations and internal alterations and quotations marks omitted). Here, Alaska's alleged injury

"flows from the legal rationale employed by the Commission . . . not from the denial of relief actually sought by [the state] before the agency." *Shell Oil Co. v. FERC*, 47 F.3d 1186, 1201 (D.C. Cir. 1995). We have previously found such an unfulfilled desire insufficient to confer Article III standing in the absence of any concrete harm. *Id.* at 1201-02; *see Crowley Caribbean Transp., Inc. v. Pena*, 37 F.3d 671, 674 (D.C. Cir. 1994). That understanding equally applies here.

Additionally, Alaska seeks to present an issue not raised by Petro Star. As a general matter, however, "[i]ntervenors may only argue issues that have been raised by the principal parties; they simply lack standing to expand the scope of the case to matters not addressed by the petitioners in their request for review." *NARUC v. ICC*, 41 F.3d 721, 729 (D.C. Cir. 1994); *see Cal. Dep't of Water Res. v. FERC*, 306 F.3d 1121, 1126 (D.C. Cir. 2002). We thus conclude that Alaska lacks standing to challenge the "unjust or unreasonable" standard applicable in proceedings concerning the Quality Bank methodology.

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For the foregoing reasons, we grant the petition for review and remand the matter to the Commission.

So ordered.