ARCO Pipe Line Company
Opinion No. 351
52 FERC ¶ 61,055 (1990)

On March 31, 1986, ARCO Pipe Line Company (ARCO) filed with the Federal Energy Regulatory Commission (Commission) a general rate increase.

An initial decision was issued by the Presiding Administrative Law Judge (ALJ) on June 17, 1988. (43 FERC ¶ 63,033). The initial decision covered seventeen issues including a variety of generic issues of interpretation of Opinion Nos. 154-B (31 FERC ¶ 61,377 (1985)) and 154-C (33 FERC ¶ 61,327 (1985)).

Initially, the Commission determined that ARCO had not justified its proposed cumulative capital structure, therefore, ARCO's parent capital structure would be used to derive ARCO's starting rate base. (52 FERC ¶ 61,055, 61,232-34).

The application of the allowance for funds used during construction (AFUDC) was a major issue. The Commission agreed with the ALJ that ARCO was not entitled to include AFUDC in its starting rate base. (Id. at 61,234-35). The starting rate base was not meant to be used as a vehicle to reconstruct original cost or reproduction costs ab initio. The Commission also agreed with the ALJ that ARCO was not entitled to capitalize past overhead expense as part of the original cost portion of the starting rate base. (Id. at 61,236).

Another key issue was whether ARCO could amortize any portion of its write-up in the starting rate base. The ALJ found that the Commission in Opinion No. 154-B did not intend to allow amortization of the write-up because oil pipeline investors did not rely on a write-up factor under ICC regulation, nor was such amortization necessary to put older and newer pipelines on an equal footing. (Id. at 61,236). The Commission agreed with the ALJ's treatment on this issue. (Id. at 61,237).

Concerning deferred tax issues, the Commission found that (1) ARCO could not earn a return from ratepayers on cost-free deferred tax balances (Id. at 61,238), (2) the rate base should be trended after, not before, deferred taxes are credited against the rate base (Id. at 61,238-39), and (3) ARCO may include its crude oil inventory in its working capital allowance at a value not to exceed cost. (Id. at 61,240).

As to return allowance issues, the Commission confirmed that the illustrative language in Opinion No. 154-B describing TOC and the relationship of rate base and capital structure (See 31 FERC ¶ 61,377 at 61,834) specifically described how return was to be derived for existing, but not new, pipelines. Also, the Commission noted that it adhered to the weighted cost of capital, rather than a "two rate base", approach for oil pipelines. (52 FERC at 61,242).

ARCO Pipe Line Company,
Opinion No. 351,
Opinion and Order Affirming In Part and Modifying In Part Initial Decision
52 FERC ¶ 61,055 (1990)

[¶ 61,055]

ARCO Pipe Line Company, Docket Nos. IS86-3-000, IS87-1-000, and IS87-13-000

Opinion No. 351; Opinion and Order Affirming in Part and Modifying in Part Initial Decision

(Issued July 18, 1990)

Before Commissioners: Martin L. Allday, Chairman; Charles A. Trabandt, Elizabeth Anne Moler and Jerry J. Langdon.

[Note: The Initial Decision of the presiding administrative law judge issued June 17, 1988, appears at 43 FERC ¶ 63,033.]

Appearances

Steven H. Brose, Steven Reed, Elizabeth Jordon Gianturco, and *John T. Updegraff* on behalf of ARCO Pipe Line Company

John D. Gossel, William J. Froehlich, Thomas J. Burgess, Robert L. Woods, and *Marvin T. Griff* on behalf of the Staff of the Federal Energy Regulatory Commission

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[5] Order No. 436, *FERC Statutes and Regulations, Regulations Preambles 1982-1985* ¶ 30,665, at p. 31,519 (1985).

[6] Id. at p. 31,520.

[7] 43 FERC ¶ 61,196, *reh'g denied*, 44 FERC ¶ 61,105, at p. 61,298 (1988).

[8] Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol, Order No. 500-H [*FERC Statutes and Regulations* ¶ 30,867] (December 13, 1989), *modified*, Order No. 500-I [*FERC Statutes and Regulations* ¶ 30,880] (Feb. 12, 1990).

rate base in dollars for existing plant in order to "bridge the transition from valuation to TOC." [11] The starting rate base consists of the sum of a pipeline's debt ratio times book net depreciated original cost 'and the equity ratio times the reproduction cost portion of the valuation rate base depreciated by the same percentage as the book original cost rate base has been depreciated.[12] Opinion No. 154-B stated that the formula was "fair in view of pipeline investor reliance on a rate base which has been adjusted for inflation," [13] and that it would "more closely approximate the TOC rate base that would have existed had the [Interstate Commerce Commission] not written-up debt [in the valuation formula and] will ensure that the equity holder does not benefit from the write-up of debt financed assets." [14] Opinion No. 154-B also noted that "for the purpose of determining the starting rate base, [the] capital structure [to determine the debt and equity ratios] shall be the actual capital structure as of the date of this opinion." [15]

B. *Capital Structure to Use to Derive Starting Rate Base*

The ALJ rejected ARCO's position that its starting rate base should be computed using a cumulative average of its parent's (Atlantic Richfield Company) debt and equity ratios from 1970-1983 (27.7% debt and 72.3% equity) rather than its parent's debt and equity ratios as of June 30, 1985 (35.99% debt and 64.01% equity). The ALJ first stated that he was bound by Opinion No. 154-B's requirement that the capital structure as of June 30, 1985, be used, and that, in any event, ARCO had not justified using its proposed cumulative average capital structure.

ARCO argues that Opinion No. 154-B did not set forth a binding rule and that its proposal is warranted in light of the "unrebutted record evidence that [its] mid-1985 capital structure was reflective of unusual forces with atypical effects." [16] This was due to its parent's issuing new debt to enable it to repurchase its own common stock owing to anxiety about hostile takeover bids. ARCO further urges that the fourteen-year period is reasonable because it "encompasses the period during which most of the gross carrier property in the [starting rate base] was placed in service." [17] Last, ARCO states that its proposal does not present a problem of post-hoc manipulation of the capital structure which it believes was the Commission's concern in adopting the June 30, 1985 date.

The Commission adopted the date certain of June 30, 1985, for determining the capital structure to use in deriving the starting rate base to prevent manipulation of the capital structure, to promote administrative convenience, and to reflect the value of the pipeline's assets at the transition date. Past capital structures are not relevant to determining that value as is the case in any rate proceeding where assets are presumed to reflect the then current capital structure. Of course, the Commission is concerned about whether a capital structure is abnormal. But the correct yardstick is not whether the 'pipeline's capital structure is in tune with historical capital structures. Rather, it is whether the capital structure is representative of the pipeline's risks. ARCO has not claimed that a 64.01 per cent equity capital structure is not representative of its

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[11] *Id.* at p. 61,833.

[12] The formula is: $SRB = O(1-e) + R(e)$

Where:

SRB = starting rate base

O = book net depreciated original cost

R = net depreciated reproduction cost

e = ratio of equity to total capitalization

[13] 31 FERC ¶ 61,377, at p. 61,836.

[14] *Id.*

[15] *Id.* at p. 61,839 n.43.

[16] Brief on Exceptions at 91.

[17] *Id.* at 89.

"consistent with Opinion No. 154-B's theme of competitive equality for older and newer pipelines" [22] and of "promoting competition among *pipelines*." [23] The AOPL asserts that equity-related AFUDC should be included in the starting rate base "to put a pipeline ... in the position it would have been in at the time of transition if the TOC methodology adopted in Opinion No. 154-B had been in place from the outset," [24] and that "inclusion is *required* by the policy considerations underlying Opinion No. 8154-B." [25]

The Commission agrees with the ALJ that ARCO is not entitled to include AFUDC in its starting rate base. The starting rate base is an artificial construction devised to enable the oil pipeline industry to have a smooth transition from the valuation rate base to the trended original cost rate base. The starting rate base was not meant to be used as a vehicle to reconstruct original cost or reproduction cost *ab initio*. The ALJ was correct that footnote 38 to Opinion No. 154-B applied only to new plant.[26] It is true that the starting rate base formula excludes the ICC's 6 percent add on to valuation for going concern value. But that was because the Commission found going concern value to be unjustified.[27] That does not justify recomputing original cost to include items excluded by the ICC even on a depreciated balance basis. Of course, adjustments of some kind may be required to derive original cost. Here, for example, costs had to be allocated between ARCO's crude oil and refined products lines and deferred taxes had to be determined. But those matters of allocation and determination are different from new additions to rate base.[28] The Commission's statement that a starting rate base was used to put the pipelines in a position approximate to that which would have existed had TOC been in place *ab initio* refers to trending only equity and not debt.[29] That statement does not justify a retroactive recalculation of the rate base.[30]

With respect to policy, the Commission in adopting TOC was concerned about the ability of newer pipelines to compete with older pipelines. TOC alleviates this problem because it eliminates the front-end load associated with net depreciated original cost by reducing equity return in the pipeline's early years. However, the Commission's policy of promoting competition among pipelines does not include raising the rates of the older pipelines merely to permit newer pipelines to compete. TOC, to the contrary, changes the timing pattern of rate recovery for newer pipelines to help them to compete.

2. Capitalized Overhead

The ICC did not permit the capitalization into rate base of overhead expenses related to construction work in progress. The Commission allows such an addition to rate base. The ALJ rejected ARCO's argument that it should be allowed to adjust the depreciated original cost component of the starting rate base to include past overhead. He stated that: "There is no room for retroactive 'massaging' of the [depreciated

[22] *Id.* at 77.

[23] *Id.* at 79.

[24] Brief on Exceptions at 36.

[25] *Id.* at 38.

[26] The Commission's intent in footnote 38 was to put oil pipelines on the same basis as gas pipelines and electric companies where AFUDC is recognized as a component of construction cost.

[27] 31 FERC ¶ 61,377, at p. 61,836.

[28] ARCO is correct that net depreciated original cost is to be taken from the pipeline's books and not from the valuation formula as assumed by the ALJ. *Williams Pipe Line Co.*, 31 FERC ¶ (61,377, at p. 61,839 n.40 (1985). But ARCO's point is of no moment because the Commission's analysis assumes that point.

[29] 31 FERC ¶ 61,377, at p. 61,836.

[30] The Commission concludes that whether ARCO recovered sufficient equity returns under valuation is irrelevant to the resolution of the issue.

ogy established in Opinion No. 154-B had been in place from the outset."[37] At the very least, the AOPL contends, consistency requires that if the write-up is not amortized as an expense, it should not be depreciated for rate base/rate of return purposes. The AOPL also addresses 'the ALJ's conclusion that the write-up in the valuation rate base was not amortized so that there was no investor reliance. The AOPL first states that investor expectation was only one of the purposes of the transition provisions of Opinion No. 154-B.[38] Second, the AOPL points to Commission rejection of other elements of the valuation rate base such as the 6-percent allowance for going concern value as justifying rejection of past nonamortization, which makes sense under a cost-based regime unlike a going concern value. The AOPL further contends that the ALJ's conclusion will cause rate disparities between competing older and newer pipelines in contravention of a functional objective of the transition provisions of Opinion No. 154-B. The AOPL states that these rate disparities will be caused by the different time patterns of rates stemming from exclusion and inclusion of amortization. Hence, the AOPL claims that newer pipelines will not be able to compete with older pipelines because of the latter's lower rates caused by exclusion of amortization. Last, the AOPL argues that denial of amortization amounts to an unconstitutional confiscation of deferred earnings.

The Commission agrees with the ALJ that ARCO is not entitled to amortize the write-up in the starting rate base as a cost-of-service expense. As the ALJ found, the ICC did not permit the amortization of the write-up in the starting rate base so there can be no claim of investor reliance. In addition, there has been no showing that the write-up in the stating rate base represents deferred earnings. The fact that under the valuation method there was no amortization of the difference between valuation and net depreciated original cost is evidence that the difference did not represent deferred earnings. The valuation methodology was a fair value methodology and not the equivalent of TOC where the write-up does represent deferred earnings. The shift from a valuation to a TOC methodology does not transform the write-up into deferred earnings or any other expense. Accordingly, the denial of amortization does not constitute confiscation. The claim that newer pipelines will not be able to compete because their allowed rate will be higher than those of older pipelines, even if true, is no justification for permitting the older pipelines to collect a phantom cost which would be a windfall to these older pipelines. Last, the write-up should not be permanent even though it is not amortized as an expense. This is because the ICC depreciated valuation for return purposes despite computing depreciation solely on original cost.

E. *Deferred Tax Issues*

1. Rate Base Crediting

ARCO calculates its income tax allowance or expense using the normalization method. Under that method, ARCO, for example, accelerates its depreciation expense for tax purposes, but computes its tax expense for rate purposes as if it were paying the higher taxes required by its book depreciation method (such as straight-line). The difference between the book or rate tax expense amount and the actual tax amount is placed in a deferred tax reserve account.[39] Later, when the depreciation expense amounts reverse so that taxable income is higher than book (rate) income because depreciation as a tax expense is less than depreciation as a book (rate) expense, ARCO will use its deferred tax balances to pay the higher taxes that it does not collect in its

[37] Amicus Brief on Exceptions at 26.

[38] *Id.* at 28, 29.

[39] ARCO's "actual" tax amount is its stand-alone tax computation using its tax expense deductions.

> to "store" that four percent of its . . . rate base, or $40,000, in the rate base by way of a write-up. To accomplish this, we must multiply the $1,000,000 . . . rate base by 1.04. That gives us a product of $1,040,000. If we deduct the $100,000 of ADIT balance from this amount, the result is $940,000, $40,000 more than the $900,000 difference that results from deducting the ADIT balance of $100,000 from the . . . rate base of $1,000,000. Hence, the pipeline under this methodology has received the four percent write-up to which it was entitled.
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> Under the Staff's method, however, the company receives only $36,000. The Staff's method would require deducting the ADIT balance of $100,000 from the . . . rate base of $1,000,000 as a first step, then multiplying the $900,000 difference by 1.04 to produce a written-up . . . rate base of $936,000. Interestingly enough, this is the same figure that results from writing up *both* the . . . rate base and the ADIT balances and then netting the latter against the former *viz.*:
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> | | | | |
> |---|---|---|---|
> | . . . Rate Base | $1,000,000 x 1.04 | = | $1,040,000 |
> | ADIT Balance | $ 100,000 x 1.04 | = | $ 104,000 |
> | | Difference | | $ 936,000 |
>
> This demonstrates that the effect of the Staff's methodology is to write up the ADIT balance before deducting it from the . . . rate base. There is no justification for doing so. To use the Staff's method is to deprive [ARCO] of a portion of the benefit of trending the rate base to which it is entitled.[42]

The Commission reverses the ALJ's decision. A pipeline's return allowance is determined with reference to its net rate base which is the gross rate base minus *accumulated* deductions or credits such as accumulated depreciation, accumulated amortized deferred earnings, and accumulated deferred taxes. This ensures that the pipeline earns a return only on capital invested in rate base that is not cost free. The same principle should apply when return is split between current return and deferred return. Both should be determined by multiplying the rates of return times the net rate base. Of course, allowed return is not determined between rate cases. However, under TOC, the rate base must be adjusted each year to account for the write-up and the appropriate rate base credits such as depreciation and deferred taxes to yield a net rate base for the next rate case. The trending in this circumstance should also be done after the rate base has been credited with accumulated depreciation and deferred taxes to ensure that deferred earnings relate only to capital invested in the rate base. The ALJ, by permitting trending on $1,000,000 as opposed to $900,000, has allowed deferred earnings of $4,000 on $100,000 of capital that is cost free. Staff's method does not, in effect, write up the deferred tax balance. The ALJ's demonstration merely keeps the rate base and deferred tax amounts *in sync.* It does not show a deferred tax write-up which keeps the pipeline from receiving the write-up to which it is entitled; $1,000,000 − $100,00 = $900,000 × 1.04 = $936,000. The $100,000 in deferred taxes represents cost free capital on which there should not be any write-up.

3. Deferred Taxes on Oil Inventory Write-Down

[42] 43 FERC ¶ 63,033, at p. 65,395.

debt cost of 8 percent, an equity ratio of 30 percent, and an equity cost of 16 percent. A debt equity chart determining the weighted cost of capital would be:

Debt	70%	8%	5.6	
Equity	30%	16%	4.8	
			10.4	percent

Allowed return would be $104 — 10.4 percent times $1,000. This is the after-tax return. The tax allowance is determined by "grossing up" the equity return. If the tax rate were 50 percent, then the company would be entitled to an additional $48 (50/50 times $48 (4.8 percent times $1,000)).

The instant issue arises because Opinion No. 154-B established a starting rate base for then existing pipelines which includes a write-up over net original cost. As described above, the starting rate base is the sum of the equity ratio times the net reproduction part of the valuation rate base and the debt ratio times net original cost. For example, assume the same debt and equity ratios and net reproduction cost of $1667 and net original cost of $1,000. The starting rate base would be $1,200 (30 percent times $1667 + 70 percent times $1,000). The staff advocates using the weighted cost of capital approach to 'determine ARCO's after tax return allowance. This is illustrated as follows, assuming an inflation rate of 7 percent to determine Opinion No. 154-B's real rate of return on equity.

Debt	70%	8%	5.6
Equity	30%	9%	2.7
			8.3

Allowed return would be $99.60 — 8.3 times $1,200.

ARCO argues for a different methodology. It would create two rate bases consisting of a Trended Original Cost (TOC) rate base for equity and a Depreciated Original Cost (DOC) rate base for debt. TOC would be $500 (30 percent times $1,667) and DOC would be $700 (70 percent times $1,000). Return would be $500 times 9 percent, $45 and $700 times 8 percent, $56 — a total of $101. The ALJ adopted ARCO's approach which is also supported by the AOPL.

The pertinent parts of Opinion No. 154-B are as follows:

> First, TOC, just like net depreciated original cost, requires the determination of a nominal (inflation-included) rate of return on equity that reflects the pipeline's risks and its corresponding cost of capital. Next, the inflation component of that rate of return is extracted. This leaves what economists call a "real" rate of return. The real rate of return times the equity share of the rate base yields the yearly allowed equity return in dollars. The inflation factor times the equity rate base yields the equity rate base write-up. That write-up, like depreciation, is written-up or amortized over the life of the property.[45]
>
> *Relationship of Rate Base and Capital Structure*
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> We describe the relationship between rate base and capital structure by an illustration. Assume a starting rate base of $1,200 a debt ratio of 70%, a debt cost of 8%, and equity ratio of 30%, a nominal equity cost of 16%, an inflation rate of 7%, and a real equity cost of 9%. A debt equity chart would be:

Debt	80%	8%	5.6
Equity	30%	9%	2.7
			8.3

[45] 31 FERC ¶ 61,377, at p. 61,834.

ARCO's parent, the Atlantic Richfield Company, had a capital structure as of the end of the test year (December 31, 1986) of 55.88 percent debt and 44.12 percent equity. The ALJ concluded that if a capital structure was needed, he would adopt Atlantic Richfield's capital structure because it is an actual capital structure rather than a "calculated number based largely on historical events."[51] That refers to ARCO's 14-year study of Atlantic Richfield's average capital structure which the ALJ rejected. ARCO excepts.

ARCO argues that Atlantic Richfield's capital structure should not be used because it "is far out of line with what would be reasonable for a highly competitive oil pipeline such as [ARCO]"[52] and because it is "not typical of Atlantic Richfield's capital structure from a historical point of view."[53] ARCO argues that the Commission should adopt either the 27.3 percent debt ratio sponsored by it or the 35.99 percent debt ratio sponsored by the Commission staff for the starting rate base (Atlantic Richfield's debt as of June 30, 1985).

While it is the Commission's general policy to use actual capital structures for the purpose of developing the weighted rates of return for gas and oil pipelines, the Commission has fashioned an exception where an equity ratio moves upward beyond generally accepted limits and it would be necessary to prescribe an anomalous rate of return on equity to mitigate the adverse effects on ratepayers of the abnormally high equity ratio.[54] The Commission believes that this policy should also apply in the circumstance of an anomalously low equity ratio when three conditions are met. First, the capital structure must be that of the parent.[55] Second, the parent's capital structure must not be representative of the pipeline's risks. Third, the anomalous capital structure cannot be accounted for via an adjustment to the pipeline's rate of return on equity. ARCO meets the first two tests. The appropriate capital structure under Opinion No. 154-B is that of its parent. In addition, the Commission agrees with the ALJ's conclusion that ARCO's risks are greater than those faced by the six natural gas pipelines used by the staff in its rate of return study. Hence, a 55.88 percent debt/44.12 percent equity capital structure is abnormal for a company of ARCO's risks.[56] However, the Commission will not adjust the capital structure. Rather, it will account for the capital structure's somewhat high debt ratio and low equity ratio in determining ARCO's rate of return on equity.[57]

C. *Rate of Return on Equity*

ARCO proposed a nominal rate of return on equity of 14.1 percent. The staff proposed a nominal rate of return on equity of 12.5 percent. After an exhaustive discussion of the proposals, the ALJ concluded that ARCO was entitled to a nominal rate of return on equity of 13.15 percent.[58] Both ARCO and the staff except. Most pertinent to the ALJ's discussion was his conclusion that ARCO "faces risks that are considerably more severe than those imposed on shareholders of the six natural gas

[51] 43 FERC ¶ 63,033, at p. 65,379.

[52] Brief on Exceptions at 81.

[53] *Id.*, quoting the staff's Initial Brief to the ALJ at 47.

[54] *E.g., Alabama-Tennessee Natural Gas Co.*, 38 FERC ¶ 61,251, *reh'g granted in part and denied in part*, 40 FERC ¶ 61,244 (1987).

[55] If the regulated company raises its own debt capital with no parent guarantees, there is no reason to impute equity.

[56] In 1986, the average capital structure for major gas pipelines consisted of 45 percent debt (and preferred stock) and 55 percent common equity. Statistics of Interstate Natural Gas Pipelines 1987, Energy Information Administration, Washington, D.C.

[57] The high end of equity is ARCO's own recommended capital structure of 35.99 percent debt and 64.01 percent equity.

[58] 43 FERC ¶ 63,033, at pp. 65,382-90.

difficulties involved, the Commission will adopt ARCO's approach and permit it to use a rate of return on equity for AFUDC purposes of 17.0 percent for 1984 and 1985.

III. Oil Shortage Expense

ARCO experiences the loss of oil in transit from a variety of causes such as evaporation. ARCO's delivery obligation is the oil tendered by shippers minus a 0.2% pipeline loss allowance (PLA). From 1980-1985, ARCO's actual oil losses exceeded its PLA. Hence, it had a shortage which it made up at its own expense either out of its own oil inventory or from open market purchases. The oil shortage account is treated as a cost-of-service expense and the oil inventory account is treated as an addition to working capital. However, during the 1986 test year, ARCO's actual losses were lower than its PLA, thereby creating a negative shortage expense which would be a deduction from working capital. The first nine months of 1987 produced a shortage again. The ALJ upheld ARCO's oil shortage expense of $1.3 million based on a six-year average as appropriate where the 1986 test year negative expense of $800,000 was atypical. He rejected staff's argument that three years is the Commission's averaging limit. Staff excepts and argues that "under the data available through the stipulated test year period, a downward trend has definitely been shown [and] [t]herefore, averaging is not appropriate and the 1986 test year figure of [a negative] $800,000 should be adopted."[64] ARCO responds that the test year oil shortage expense was anomalous and that its averaging mechanism is substantiated in the record.

The Commission agrees with the ALJ that the test year data is anomalous and should not be used in light of the 1987 data which indicates a reversal in any downward trend. The next issue is whether ARCO's six-year study should be used to derive the oil shortage expense. The Commission affirms the ALJ's adoption of ARCO's six-year average and his conclusion that ARCO's expert witness "was certainly qualified to vouch for the use of that period" as "long enough to provide a representative sample of actual business activity avoiding the distortion of short-term data, while being current enough to reflect the kind of results we are likely to see in the near-term future."[65]

The Commission orders:

(A) The Initial Decision of the administrative law judge is affirmed except as modified in accordance with this order.

(B) Within 45 days after issuance of this order (or 30 days after issuance of a final order on rehearing if there are requests for rehearing pending at the close of the 45-day period), ARCO shall file revised tariffs (and detailed supporting work papers) on 30-days notice in accordance with the findings and conclusions of this order, along with a proposed plan of refunds showing the detailed calculation of proposed refunds to particular shippers that will be necessary as a result of the actions taken in this order.

(C) Within 30 days after Commission acceptance of ARCO's revised tariffs and proposed refund plan filed pursuant to Ordering Paragraph (B), ARCO shall make refunds to its customers and file a refund report with the Commission showing the calculation and payment of any refunds that become necessary as a result of the actions taken in this order.

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[64] Brief on Exceptions at 11.

[65] 43 FERC ¶ 63,033, at p. 65,392.