

1 electric utility industry³⁶³ that, Tesoro asserts, show that when interest rates *increase* by
2 100 basis points, the equity risk premium will *decrease* by 37 basis points. Similarly,
3 when interest rates *decrease* by 100 basis points, the equity risk premium above those
4 riskless investments will *increase* by 37 basis points.³⁶⁴

5 Like Tesoro, Williams backcasts only equity rates of return. Williams thus
6 also avoids relying on the Modigliani-Miller hypothesis. Williams' backcast analysis,
7 however, differs from both the Carriers' and Tesoro's. Williams relies on data for rates
8 of return for comparable pipelines beyond the 1997-1998 time frame. Williams uses
9 three different methods to backcast equity returns and then uses the average of the
10 results produced by the three different methods. Williams multiplies the average of the
11 three methods by 1.05 to reflect a five percent common equity flotation.³⁶⁵ We discuss
12 Williams' three methods separately.

13 The first method starts by using publicly available data for the pipelines in
14 the petroleum pipeline proxy group to perform a traditional discounted cash flow (DCF)
15 analysis of required investor returns. In a DCF analysis, the most critical parameter is
16 the expected rate of growth in stock dividends. Williams relies upon Institutional
17 Brokers Estimate System (I/B/E/S) data for the expected growth rate.³⁶⁶ Because the
18 I/B/E/S data on which Williams relies is generally only available for the proxy sample
19 companies as far back as 1990,³⁶⁷ yearly DCF estimates of equity returns can be
20 determined only for some of the many years at issue. To determine DCF-based returns

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22 ³⁶³See WBT-52, Panel C. All of the parameter estimates in that paper are
statistically significant. *Id.*, at 6.

23 ³⁶⁴FJH-T (E-2) 67.

24 ³⁶⁵See JSG-2 Schedule 8.

25 ³⁶⁶JSG-T (W-2) 32. I/B/E/S publishes a survey of financial analysts' predictions
for future performance.

26 ³⁶⁷*Id.*

1 for earlier years, Williams estimates the *average* risk premium over the long-term U.S.
2 Treasury bond yields for the five earliest years for which I/B/E/S data are available.³⁶⁸
3 Williams then adds this average risk premium to the actual yield on Long-Term U.S.
4 Treasury bonds for each of the earlier years for which data were unavailable to produce
5 a backcast estimate for the annual return on equity for each company.³⁶⁹ The annual
6 median return of the group is then adopted as the petroleum pipeline proxy equity
7 return.³⁷⁰

8 Williams' second method is similar to the first, with the difference being
9 that Williams calculates DCF returns for each of the TAPS Carrier parent companies.
10 Williams uses historical data to calculate DCF required equity returns. Where I/B/E/S
11 growth rate forecasts are available for a given company, Williams uses them.³⁷¹ For a
12 number of years before 1981, Williams uses Value Line data to calculate a retention
13 growth rate.³⁷² The moving three year average growth rate of retained earnings is then
14 used as an estimate of future rates of growth within a DCF framework. When retention
15 growth rate data are not available, Williams backcasts equity rates of return in similar
16 fashion to the approach used for the petroleum pipeline proxy companies.³⁷³ Where
17 results of this analysis fail to yield results of return on equity that are reasonable in light
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20 ³⁶⁸*Id.*

21 ³⁶⁹JSG-2 Schedule 11 at 2-7.

22 ³⁷⁰JSG-2 Schedule 11 at 1. Gaske explained that his use of the median of the
23 data, rather than the mean, was informed by recent FERC practice and the fact that the
24 mean is more likely to be skewed by outliers in the data. Tr. 4386 (JSG).

25 ³⁷¹JSG-2 Schedule 12. Gaske reports that I/B/E/S data were available for most
26 TAPS parent companies as far back as 1981. JSG-T (W-2) 33.

³⁷²JSG-T (W-2) 33.

³⁷³JSG-T (W-2) 33-34.

1 of the prevailing costs of debt, Williams “pragmatically” adjusts results³⁷⁴ and uses the
2 median of the different estimates to determine annual return on equity.

3 Williams’ third method relies on past Alaskan pipeline cases to determine
4 the appropriate return on equity. From 1981-1984, Williams relies on a FERC pipeline
5 decision³⁷⁵ that established required returns to equity for the Kuparuk pipeline, an oil
6 pipeline carrying crude oil from the Kuparuk field on the North Slope to the beginning
7 point of the TAPS.³⁷⁶ For 1985-1992, Williams uses the APUC decisions³⁷⁷ for return
8 on equity for the Kenai pipeline.³⁷⁸ For years before 1981, Williams backcasts by
9 assuming that the risk premium difference between a corporate bond yield in 1981 and
10 the FERC’s equity return finding remains constant, at 4.89 percent.³⁷⁹ For years after
11 1992, Williams also assumes that the premium difference between a corporate bond
12 yield and the APUC’s equity return finding remains constant, at 5.95 percent. Williams
13 contends that the disparity in the “constant” premium differences was due to changes in
14 capital markets. Williams agrees with Tesoro’s general contention that the size of the
15 premium above a riskless investment varies inversely with interest rates.³⁸⁰

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18 ³⁷⁴JSG-T (W-2) 33.

19 ³⁷⁵*Kuparuk Transportation Co.*, 55 F.E.R.C. ¶ 61,122, 61,379 (1991).

20 ³⁷⁶JSG-T (W-2) 35.

21 ³⁷⁷*Re Kenai Pipe Line Co.*, 12 APUC 425 1992 WL 696192 (Alaska P.U.C.,
22 1992); *Re Kenai Pipe Line Co.*, 13 APUC 29 (1993).

23 ³⁷⁸JSG-T (W-2) 34.

24 ³⁷⁹See JSG-2 Revised Schedule 6. In his written testimony Gaske says that he
25 backcasts the *Kuparuk* decision data by using average yields on long-term United
26 States Treasury bonds. JSG-T (W-2) 36. A comparison of figures in JSG-2 Revised
Schedule 6 with the Treasury bond data contained in JSG-2 Schedule 11 reveals that
the JSG-2 Revised Schedule 6 data are not Treasury bond data. We infer, therefore,
that they are properly labeled and represent some sort of corporate bond data.

³⁸⁰Tr. 4374 (JSG).

1 None of the backcast methods offer the same degree of rigor as normally
2 seen for rate of return recommendations. As Williams stresses, backcasting results are
3 “not as reliable as a detailed analysis of every company for each year.”³⁸¹ We decide
4 the annual equity rate of return based on the evidence on this record.

5 We find the Carriers’ backcast method too speculative. Their
6 recommendations presume a capital structure and cost of debt that are inconsistent with
7 our findings on the appropriate capital structure and cost of debt for TAPS. Further,
8 while the Carrier’s approach might be applied to our findings on appropriate capital
9 structure and cost of debt, doing so requires complete reliance upon the validity of the
10 Modigliani-Miller hypothesis. The record suggests that as a theoretical construct, and
11 as a contribution to financial theory, the Modigliani-Miller theorem is of considerable
12 importance.³⁸² However, the record also demonstrates considerable controversy over
13 the extent to which the Modigliani-Miller theorem should be applied to public utility
14 finance and regulation.³⁸³ Because there are reasonable alternative approaches that do
15 not rely on the theorem, we pick an alternative approach.

16 The Carriers’ approach is unreliable for additional reasons. The Carriers
17 assert that “[o]ver longer time periods, the better approach is to hold constant the
18 differences between equity return and bond yields.”³⁸⁴ However, they do not provide
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20 ³⁸¹JSG-T (W-2) 32-33.

21 ³⁸²Tr. 2751-52 (WBT).

22 ³⁸³The Modigliani-Miller theorem’s applicability is affected by taxes, the threat of
23 bankruptcy, and the cost of enforcing complex debt contracts. Tr. 2755 (WBT). See
24 *also* 75-WBT-W, and Tr. 2757 (WBT). The degree to which the theorem importantly
25 deviates from real-world conditions was subject to considerable dispute at hearing.
26 See, e.g., Tr. 4984 (FJH) and Tr. 2758 (WBT).

³⁸⁴T-10 (WBT) 61. Tye urges that his view reflects “overall consensus;” he does
not, however, offer evidence. Tye advocates adopting the constant risk premium
hypothesis in the absence of strong evidence to the contrary. Tr. 2601 (WBT).

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1 empirical or theoretical support for that assertion. The Carriers' approach to calculating
2 return on equity hinges on the assumption that a constant risk premium adequately
3 approximates reality. Both Williams³⁸⁵ and Tesoro³⁸⁶ challenge this proposition. The
4 record suggests that, rather than holding constant, there is an inverse relationship
5 between an equity risk premium and a riskless investment broadly throughout the
6 economy.³⁸⁷ We, therefore, do not assume a constant risk premium.

7 Finally, even if over longer time periods the difference between equity
8 return and bond yields were relatively stable, there is significant annual variation. For
9 example, the Carriers' recommendation for what equity investors in an average pipeline
10 require is 13.3 percent for both 1997 and 1998, and 16.0 percent for 1999;³⁸⁸ the long
11 term United States Treasury bond yield was 6.60 percent, 5.66 percent and 6.11
12 percent for 1997, 1998, and 1999, respectively.³⁸⁹ The difference between bond yields
13 and recommended return on equity therefore ranges from 6.70 percent in 1997 to 9.89
14 percent in 1999. A swing of 319 basis points over three years raises the issue of
15 whether the choice of the "anchor year" (in this case, 1997) is appropriate for
16 backcasting purposes.³⁹⁰ The Carriers assert that using 1997 is conservative. To
17 achieve just and reasonable rates we must use a reasonable rather than "conservative"
18 approach. Relying on a single year, in light of the very significant annual variation, is
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21 ³⁸⁵Tr. 4374 (JSG).

22 ³⁸⁶Tr. 5056 (FJH); FJH-T (E-2) 67-68.

23 ³⁸⁷223-FJH-C Workpaper 3. The record indicates that this inverse relationship
24 also appears to hold for electric utilities. 223-FJH-C Workpaper 2.

25 ³⁸⁸T-10 (WBT) 13.

26 ³⁸⁹JSG-2 Schedule 12 at 10.

³⁹⁰As noted in Part IV Section B.2, we had similar concerns with Tesoro's
approach to backcasting the cost of debt.

1 not reasonable. Therefore, we reject the Carriers' approach to determining return on
2 equity.

3 Tesoro's approach is also inappropriate. Although Tesoro's method does
4 not require use of the Modigliani-Miller hypothesis, like the Carriers, Tesoro relies on a
5 single year for backcasting annual rates of return to 1968 and a theory about how
6 petroleum pipeline equity interest rates move with United States Treasury bond. Above,
7 we discussed the problem of relying on only a single year from which to backcast all
8 subsequent equity returns: if the single year is unrepresentative, then reliable return on
9 equity calculations are undermined.

10 We also find Tesoro's *method* of backcasting rates of return on equity too
11 speculative. Tesoro relies on parameter estimates from the electric utility industry that
12 the Carriers point out are not clearly applicable to petroleum pipelines.³⁹¹ Tesoro
13 misapplies the Maddox, Pippert and Harris results in its return on equity calculations.
14 Although Tesoro's misapplication of the Maddox *et al.* results can be partially
15 corrected,³⁹² corrections create significant out-of-sample projection problems.³⁹³ These
16 errors make Tesoro's proposed rate of return on equity calculations unreasonable.

17 ³⁹¹T-10 (WBT) 60.

18 ³⁹²WBT-52, Panel B.

19 ³⁹³While Maddox *et al.* detect an inverse relationship between the equity risk
20 premium and the interest rate on risk-free securities, this analysis assumes and finds
21 statistically significant a number of constant terms that capture the average difference
22 between equity costs and government bond yields during different time periods. Tesoro
23 ignores these constant terms. They are, however, integral to the overall projection of
24 equity rates based on bond yields. T-10 (WBT) 60. Data for the Maddox *et al.* paper
25 come from 1980 through 1993. WBT-52 Panel C at 3. Separate dummy variables,
26 crucial to the prediction of risk premium given bond yield, are calculated for the following
periods: 1984-1993, 1987-1993, 1991-1993, 1992-1993. *Id.*, at 4. Thus, these
variables change substantially from period to period, and new variables are introduced
every few years. Considering that Maddox *et al.* relied on four dummy variables for a
ten-year period, using the study results for periods 15 years earlier and 5 years later is
problematic. It is unlikely that the reliability of the Tesoro results would hold for such
extrapolations.

Williams' approach to backcasting the return on equity has several strengths. First Williams relies, whenever feasible, on available data from comparable companies. Williams constructs conventional DCF estimates of investor-required returns for the petroleum pipeline sample when possible. Second, when forced to backcast results from the petroleum pipeline sample, Williams adopts the most-recent 5-year average of the difference between the DCF equity results and riskless United States Treasury yields. Use of the 5-year average smoothes out some of the volatility that plagues the Carriers' and Tesoro's analyses. Third, Williams calibrates its recommendation by ensuring conformity to past regulatory decisions concerning appropriate equity return for Alaska oil pipelines.³⁹⁴ Fourth, the calibration seems to reflect an inverse relationship between risk premiums and interest rates over broad periods, a relationship that the record supports.³⁹⁵ Finally, Williams' approach of combining several methods for backcasting minimizes some of the effects of projection errors.³⁹⁶

Although the other parties do not directly criticize Williams' approach,³⁹⁷ we note several faults. Williams' backcast and forecast of the Alaska oil pipeline results

³⁹⁴The Alaska pipeline decisions were based on much richer equity positions than the capital structure adopted here. Accordingly, one could argue that the applicable rate of return should be adjusted to reflect this richer capitalization. See, e.g., Tr. 2948-49 (WBT). However, the Kuparuk pipeline decision adopted a return on equity based on "average petroleum pipeline" risk, without reference to the capital structure and return to debt that they adopted (which reflected parent company financials). Thus, the FERC's findings were expressly inconsistent with Modigliani-Miller. We find mechanical reliance on Modigliani-Miller both speculative and unnecessary.

³⁹⁵223-FJH-C Workpapers 2 and 3; Tr. 4374.

³⁹⁶Tr. 4382 (JSG).

³⁹⁷The Carriers argue that Gaske should have provided an increased risk premium in his backcast results. T-10 (WBT) 54. In this section of the order, however, we establish rates of return for an "average" petroleum pipeline before considering special TAPS risks. Special TAPS risks are considered in Part IV,B.4 and Endnote 8.

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1 is somewhat problematic. First, Williams uses a single “anchor year” to backcast and
2 forecast these results.³⁹⁸ Second, Williams’ use of corporate bond yields for forecasting
3 and backcasting purposes is inconsistent with its use of United States Treasuries to
4 backcast DCF results. A theory regarding the risk premium between “risk free” United
5 States Treasuries and equity returns was articulated but no corresponding theory was
6 presented for a similar relationship between corporate bonds and equity returns.³⁹⁹ To
7 produce more reasonable results, we modify Williams’ recommendation to rely on the
8 most recent five-year average of the risk premium between United States Treasuries
9 and the Alaska Pipeline decisions.

10 Finally, when determining appropriate return on equity based on Alaska oil
11 pipeline decisions, Williams reported but did not use return on equity numbers for 1985-
12 1988 from the *Kuparuk* decision.⁴⁰⁰ The 1985-1988 years, however, overlap with the
13 APUC’s *Kenai* pipeline decisions (which spanned 1985-1992). By ignoring the overlap
14 and relying only on *Kuparuk*, Williams consistently chose the higher return on equity
15 number for those three years. When given multiple choices, but no theoretical grounds
16 for choosing, the more reasonable approach is to average the overlapping numbers.⁴⁰¹
17 We thus modify Williams’ Alaska oil pipeline decision analysis.

18 The result of modifying Williams’ Alaska oil pipeline decision analysis is an
19 increase to the backcast risk premium for years before 1981 from 4.89 percent to 4.98
20

21 ³⁹⁸Gaske argued for using the “most recent” year for backcasts by saying that he
22 relied on the number that was as close to the projected or backcast period as possible.
Tr. 4373 (JSG).

23 ³⁹⁹Again, Gaske’s prefiled testimony refers to United States Treasury yields,
while his JSG-2 Revised Schedule 6 appears to use some unspecified grade of
corporate bond yields.

24 ⁴⁰⁰See JSG-2 Revised Schedule 6; JSG-T (W-2) 35; *Kuparuk Transp. Co.*, 55
25 F.E.R.C. ¶ 61,122, 61,379 (1991).

26 ⁴⁰¹Tr. 5027-78 (FJH).

1 percent, and the “forecast” risk premium for years after 1992 from 5.95 percent to 6.21
2 percent. We apply these back- and forecast risk premiums to U.S. Treasury Yields
3 rather than to corporate bond yields. The results of these modifications to Williams’
4 approach for determining return on equity are found in Exhibit 17.

5 Finally, we modify Williams’ backcast rate of return because the required
6 rates of return on equity of the TAPS parent companies bear no clear and systematic
7 relationship to the required rates of returns on equity of petroleum pipeline companies.
8 Accordingly, Williams’ reliance on the TAPS Carrier parent company DCF results to
9 derive its recommended 1968-1996 equity rates of return is not reasonable. We instead
10 average across the proxy pipeline DCF and the modified Alaska oil pipeline decision
11 results.⁴⁰² These adjustments to Williams’ analysis are shown on Exhibit 18 and yield
12 annual cost of equity for 1968-1996, not including any special TAPS risk premium. We
13 adopt the annual rates of return on equity contained in Exhibit 18 for years 1968-
14 1996.⁴⁰³

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18 ⁴⁰²Gaske urged that averaging across methods would help to smooth out
19 “random glitches” in the data. Tr. 4382 (JSG). Averaging is a reasonable approach
20 given acceptable and complementary methods.

21 ⁴⁰³The resulting annual rates of return on equity are comparable to the rates
22 awarded in other Alaska oil pipeline decisions. The APC allowed a 13.00 percent return
23 on equity for the Nikiski pipeline in 1976; the backcast return calculated above for the
24 average petroleum pipeline company in 1976 is 13.06 percent. In *Re Exxon Pipeline*
25 *Company* the APC provided for a 15 percent return; however, this appears to reflect a
26 one percent risk premium to account for special TAPS risks. See 66-WBT-E at 91-92
and 1 APUC 580, 601 (1980). Removing the 1 percent risk premium is appropriate
because we are reviewing the appropriate rate of return on equity for TAPS, to which a
risk premium may be later added. The backcast calculated above for 1978 is 14.67
percent. The APUC allowed a 17.00 percent return on equity for the Cook Inlet pipeline
in 1980; the backcast calculated above for 1980 is 17.50 percent. See 68-WBT-E for
Alaska oil pipeline decision benchmark data.

1
2 4. Risk Premium to Reflect Special Risks of TAPS

3 If the business risks of TAPS are greater than those of an average
4 pipeline project, then TAPS investors require a premium above the rate of return
5 granted to the average pipeline. The parties agree that risks for ongoing TAPS
6 operations are roughly comparable to the average risk faced by other pipelines.⁴⁰⁴ The
7 parties also agree that during its early planning and construction phase, TAPS faced
8 greater risks than those faced by an average pipeline.⁴⁰⁵ To determine an appropriate
9 risk premium for 1968-1996, we resolve three questions. First, how much
10 compensation is necessary to compensate for unusual risks? Second, should the risk
11 premium be applied to debt, equity, or both? Finally, how long should investors collect
12 this risk premium?

13 The Carriers urge that a risk premium of two to five percent⁴⁰⁶ be applied
14 to the entire TAPS investment. They assert that a risk premium should be applied to
15 the entire cost of capital, rather than just equity capital because the entire pipeline asset
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19 ⁴⁰⁴T-3 (WBT) 39; FJH-T (E-2) 65; Tr. 4944-45 (FJH); JSG-T (W-2) 39. There is
20 agreement that current risks on TAPS are either slightly more, slightly less, or equal to
21 those of the average pipeline. None of the parties proposed making an adjustment to
22 the rate of return compared with the comparative pipeline sample groups to compensate
23 for extraordinary on-going risks.

24 ⁴⁰⁵T-3 (WBT) 48; FJH-T (E-2) 55; JSG-T (W-2) 39.

25 ⁴⁰⁶T-3 (WBT) 48.
26

1 was at risk.⁴⁰⁷ The Carriers also argue that this risk premium should be applied
2 throughout the stipulated 34.5-year economic life of the line.⁴⁰⁸

3 Williams advocates that a risk premium of 0.50 percent⁴⁰⁹ be applied to
4 equity investment in TAPS.⁴¹⁰ During the hearing, Williams's expert witness testified
5 that only equity investment, rather than the entire pipeline, was put at risk. Thus only
6 equity capital was deserving of a risk premium.⁴¹¹ The Williams analysis allows for a
7 risk premium on initial project capital expenditures until such capital is recovered.⁴¹²

8 Tesoro urges that a risk premium ranging from 0.33 to 0.87 percent,⁴¹³
9 and averaging 0.48 percent,⁴¹⁴ should be applied to the entire TAPS investment.⁴¹⁵
10 While Tesoro agrees that the risk premium should be applied to the entire cost of
11

12 ⁴⁰⁷T-3 (WBT) 51-52. Although Carriers attribute a risk premium to the entire rate
13 base, in calculating AFUDC and annual revenue requirements they apply the entire
14 weight of this risk premium only to the return on equity. This considerably boosts the
15 equity risk premium; see JSG-T (W-2) 45. For example, given their recommended
16 capital structure, during 1997-2000 the Carriers' 3.5 percent midpoint risk premium on
17 all capital converts to a 4.5 to 4.7 percent equity risk premium. 71-WBT-W.

18 ⁴⁰⁸T-3 (WBT) 42.

19 ⁴⁰⁹JSG-T (W-2) 44.

20 ⁴¹⁰Williams witness Gaske's recommended overall return does not include a risk
21 premium on debt; see JSG-2 Schedule 10.

22 ⁴¹¹Although the Carriers urged that Dr. Gaske had admitted in prefiled testimony
23 that during the construction era the entire pipeline was at risk and thus deserving of a
24 risk premium (see T-10 (WBT) 39), during oral testimony Dr. Gaske reiterated his
25 opinion that only equity investment, and not the entire pipeline, was put at risk. See
26 4376-77 (JSG). Thus, his use of the phrase "entire investment" in his prefiled testimony
presumably refers only to "equity investment." See JSG-T (W-2) 42.

⁴¹²JSG-T (W-2) 44. It is not clear the duration for which Williams believes a risk
premium is appropriate, but oral testimony at the hearing suggests that Williams
advocates the risk premium applying through 2030 on construction era investment (see
Tr. 4376 (JSG)), given its view that TAPS will last through 2030. See BEW-T (W-3) 23.

⁴¹³FJH-12 at 1-2.

⁴¹⁴T-10 (WBT) 37.

⁴¹⁵FJH-12.

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1 capital, it does so only through 1981.⁴¹⁶ Tesoro asserts earlier-period risks have
2 passed, and investors require compensation only for prospective risks.⁴¹⁷

3 The parties' positions on the appropriate risk premium vary because of
4 differences in their assessment of a) the magnitude of the special TAPS risks; b) the
5 type of capital exposed to extraordinary risks; and c) the proper method for translating
6 the assessed risk into a rate of return premium that investors in a stand-alone TAPS
7 would have required. The parties' introduced record from Phase I of the original TAPS
8 litigation to evaluate the magnitude of special TAPS risks and the amount of capital
9 exposed to those risks.⁴¹⁸ The discussion of early-period TAPS risks in the Phase I
10 exhibits is much more extensive than the direct discussion by the parties' expert
11 witnesses in these dockets. We therefore consider those portions of the Phase I record
12 that were introduced in the record in these consolidated dockets along with the
13 testimony of current expert witnesses.

14 Considering a risk premium on a "backwards" looking basis is extremely
15 unusual. It is challenging because we are removed from the events that informed
16 investor perceptions of TAPS risks. Nonetheless, based on the record, we review and
17 carefully evaluate special TAPS risks as they would have been perceived from the
18 perspective of a rational, well-informed, prudent investor at the time of investment.⁴¹⁹

22 ⁴¹⁶FJH-12 at 1-2.

23 ⁴¹⁷FJH-T (E-2) 55-56.

24 ⁴¹⁸See Endnote 1 at 2-3.

25 ⁴¹⁹We must be particularly careful not to diminish the rates of return that
26 construction era investors would have demanded, particularly now that we are looking
at TAPS after more than twenty years of successful operation.

1 Relevant investor risk in TAPS can be divided into three time periods: 1)
2 before May 1974, 2) between May 1974 and June 1977, and 3) after June 1977.⁴²⁰ The
3 first was the pipeline planning phase ending with State and Federal issuance of right-of-
4 way permits. The second period was pipeline construction. The third period is pipeline
5 operation.

6 Investors faced various types of risks: non-completion, economic,
7 litigation, and regulatory. Non-completion risk is the risk that technological, regulatory,
8 or other factors could stop the project before completion. For an investor, project non-
9 completion would be catastrophic because much of the money invested would not be
10 recovered and no return earned.⁴²¹ Economic risk is the risk that cash flow will be
11 insufficient to provide adequate return on or of capital. Litigation risk consists of the risk
12 that shippers could challenge as imprudent costs that Carriers attempt to recover in
13 rates. Regulatory risk is that risk that regulators would regulate TAPS in an unusual
14 manner that would deny investors an adequate return. We analyze each of these risks
15 in detail in Endnote 8 subparts (a) through (d). Based on that analysis, we find that
16 there was significant risk to investor capital before May 1, 1974 and some risk
17 thereafter. Below we summarize our analysis of the risks facing investors.

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22 ⁴²⁰Carrier witness Tye also suggests that risks should be considered in terms of
23 three periods. His demarcation of relevant periods, planning and construction (1968-
24 1977), post-construction cost recovery (1977-1985), and ongoing operation-phase risks,
differs from ours. The difference in relevant temporal periods is due to our findings
regarding relevant risks.

25 ⁴²¹Non-completion need not entail total loss of all investment to date, given the
26 possibility of positive salvage value as well as possible tax benefits.

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- | | | |
|----|--|---|
| 1 | a. Risk of Non-completion | Non-completion risk premium awarded due to legal and regulatory uncertainty prior to May 1, 1974, but none awarded post-May 1, 1974 |
| 2 | | |
| 3 | b. Economic Risk | |
| 4 | i. Risk of inadequate physical supply | Less risk than the average pipeline |
| 5 | ii. Risk of inadequate throughput due to competition | Less risk than the average pipeline |
| 6 | | |
| 7 | iii. Risk of throughput interruption | No significant additional risk compared to average pipeline |
| 8 | iv. Risk that shipping oil is uneconomic for producers | Risk premium added for risk that post-1974 costs might be greater than those associated with an average pipeline |
| 9 | | |
| 10 | c. Post-construction regulatory risks | Policy reasons dictate no risk premium for post-construction regulatory risk |
| 11 | d. Post-construction litigation risks | Policy reasons dictate no risk premium for post-construction litigation risk |
| 12 | | |

The specific factors listed above and analyzed in Endnote 8, suggest that investors in a stand-alone TAPS would have faced greater risk than investors in an average pipeline. Accordingly, we award a risk premium. We determine an appropriate risk premium by translating risks that investors faced into a premium to the cost of capital that investors would have required.

Tesoro asserts that differences between construction risk for TAPS and TAPS' operation risk can be captured by differences in utility bonds ratings of Baa (for TAPS during 1968-1981) and A (for TAPS at present).⁴²² However, as the Carriers note, Tesoro fails to fully explain the basis for this conclusion.⁴²³ Specifically, Tesoro fails to clearly explain why the difference between Baa and A bond ratings is analogous

⁴²²FJH-T (E-2) 56.

⁴²³T-10 (WBT) 32.

1 to the risk differentials between TAPS and an average pipeline. Accordingly, we find
2 that the Tesoro analysis is too speculative to rely upon for awarding a risk premium.

3 Williams calculates a special TAPS risk premium by postulating an
4 additional 10 percent probability of losing the entire equity investment, above and
5 beyond those faced during construction by average pipelines prior to operation.⁴²⁴
6 Williams' urges that this would be a very high additional probability, and is probably
7 unrealistic.⁴²⁵ Nevertheless, based on this assumed probability, Williams considers the
8 added rate of return that would be needed to make investors "whole." Williams notes
9 that the required return on common equity for sample pipelines was roughly 14.5
10 percent. Williams then assumes a hypothetical dividend yield (\$4.50), a hypothetical
11 share value (\$100), and a hypothetical expected growth rate (10 percent) that under a
12 DCF analysis produces the 14.5 percent rate of return.⁴²⁶ Williams reasons that an
13 additional risk of losing 10 percent of the entire investment would reduce share value to
14 \$90, so that within a DCF framework the resulting return on equity would be 15 percent.
15 Accordingly, Williams proposes a risk premium of 50 basis points.⁴²⁷

16 This analysis is not reliable for two reasons. First, based on a thorough
17 reading of the evidence in the record, we do not agree with the assessment that rational
18 equity investors perceived a risk of as much as 10 percent of losing their entire
19 investment. Second, as Williams witness Gaske readily admits, the entire calculation --
20 the stock price, the dividend rate, and the growth rate -- is hypothetical.⁴²⁸ If one

21 ⁴²⁴JSG-T (W-2) 42.

22 ⁴²⁵JSG-T (W-2) 42.

23 ⁴²⁶JSG-T (W-2) 43-44.

24 ⁴²⁷JSG-T (W-2) 43-44.

25 ⁴²⁸Tr. 4378 (JSG). The hypothetical nature of all the terms in Dr. Gaske's
26 calculation further underscores the tenuous nature of the assumption that an additional
10 percent probability of losing the entire equity investment existed.

1 chooses parameters other than those chosen but consistent with the 14.5 percent
2 average equity rate, then an entirely different risk premium emerges. Given the lack of
3 actual data on stock price, dividend rate, and growth rate of a stock compared to TAPS,
4 we find Williams' method too speculative.

5 The Carriers present two complimentary approaches to deriving an
6 appropriate TAPS risk premium. First, the Carriers appeal to market data which reveal
7 that investors demand greater returns for risky projects. The market data are intended
8 to indicate a lower bound on the level of acceptable risk premiums.⁴²⁹ Second, the
9 Carriers then present a specific method for translating extraordinary TAPS risks into
10 required return premiums. We review the Carriers' approaches below.

11 Carriers present three types of market evidence to indicate what they
12 regard as minimum risk premiums for TAPS. First, the Carriers point to an academic
13 study that shows that third-party guarantees reduce the costs of project finance loans by
14 an average of nearly 43 basis points.⁴³⁰ The Carriers assert that, because TAPS was
15 substantially larger than the projects sampled in the study, the risk premium demanded
16 by TAPS investors will be "well in excess" of this amount.⁴³¹

17 Second, the Carriers cite academic authority that indicates that investors
18 in BB-rated rated bonds demanded an average rate of return premium of 2.1 percent
19 over AA-rated bonds.⁴³² The Carriers then point to the cumulative default rate on the
20 lower grade bonds (6.64 percent) and the ultimate average recovery of original
21 investment (36 percent) once default has occurred.⁴³³ They reason that, because the

22 ⁴²⁹T-10 (WBT) 50.

23 ⁴³⁰T-10 (WBT) 46.

24 ⁴³¹T-10 (WBT) 46.

25 ⁴³²T-10 (WBT) 49.

26 ⁴³³T-10 (WBT) 50.

1 TAPS early-period risks of losing the entire investment were greater than the risks faced
2 by holders of BB-rated bonds, the required risk premium for TAPS should be at least 2
3 percent.⁴³⁴

4 Finally, the Carriers cite an academic study that shows that “large
5 engineering projects,” projects with an average value of \$1 billion, often turn out to be
6 bad investments.⁴³⁵ A significant portion of the projects fail.⁴³⁶ TAPS was an especially
7 large project. The Carriers conclude, therefore, that the assumption of a 10 percent risk
8 of losing the entire investment should be considered a lower bound of the early-period
9 risks faced by TAPS.⁴³⁷

10 The academic studies of market data to which the Carriers appeal show
11 that investors demand compensation for investing in riskier projects. They also show
12 that large projects can generate large risks. However, the Carriers fail to provide good
13 evidence that the studies cited are relevant to the comparative risks between TAPS and
14 the average pipeline.

15 For example, the Carriers do not explain why the TAPS was akin to the
16 sample of projects considered in the first study that they cite. The Carriers assert that
17 because TAPS was a bigger project than those studied its parent company loan
18 guarantees would “surely” require a greater risk premium. However, the record is silent
19 on the nature of the businesses and thus on baseline risks of projects considered by the
20 study. Without knowing this baseline, how TAPS risks compare to this baseline, and
21 how the value of third party guarantees change as baseline risk changes, we cannot
22

23 ⁴³⁴T-10 (WBT) 50.

24 ⁴³⁵T-10 (WBT) 47-48.

25 ⁴³⁶T-10 (WBT) 47-48.

26 ⁴³⁷T-10 (WBT) 48-49.

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1 meaningfully draw conclusions about the risk premium that TAPS investors would
2 demand. Similarly, with reference to the second study, the Carriers fail to adequately
3 explain why the risk of TAPS compared to an average pipeline company is analogous to
4 the risk of projects financed with BB compared to projects financed with AA grade
5 bonds. Finally, although it is clear that TAPS was a large engineering project, the
6 Carriers do not adequately explain why investing in TAPS was “certainly” more risky
7 than investing in tunnels, subways, airports, toll roads and power plants⁴³⁸ (large
8 projects that sometimes fail). The record does not provide information on the risks that
9 these other projects confront. In conclusion, we find that the studies cited by the
10 Carriers do not provide convincing evidence of a lower bound on the risk premium that
11 TAPS investors would demand.

12 The Carriers present a method for specifically quantifying a rate of return
13 premium to reflect special TAPS risks. The method is based on an assessment of an
14 investor’s perceived probability of losing their entire investment. The Carriers’ approach
15 is designed to determine how much of an extra return is required to allow an investment
16 with extra risks of losing the entire investment to yield the same expected value of future
17 returns as an investment without these additional risks.⁴³⁹ The method requires
18 assessing the probability of capital loss, estimating the cost of capital without the risk
19 premium, and making an assumption about the economic life of the line that investors
20 perceived when they made their investment.⁴⁴⁰ Different assessments of these three
21 variables will generate different required risk premiums. Such flexibility and
22 transparency is certainly a virtue.

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24 ⁴³⁸T-10 (WBT) 48.

25 ⁴³⁹T-3 (WBT) 48-49.

26 ⁴⁴⁰See WBT-49, Panels B-E.

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1 This method, however, also implicitly assumes that a risk premium needs
2 to be recovered into the future, even when the risks for which compensation is awarded
3 have passed.⁴⁴¹ The parties present divergent views on whether we should award a
4 risk premium prospectively. Accordingly, if the Carriers' method is to be used to assess
5 the required risk premium demanded by TAPS investors, we must resolve the question
6 of whether a risk premium can properly be included in rates after the risk has passed.

7 The Carriers assert that special risks during development, construction,
8 and post-construction can only be compensated through higher expected earnings
9 during project operation.⁴⁴² Therefore, a risk premium must necessarily be awarded
10 after risks have passed. The Carriers assert that unless investors can reasonably
11 expect this compensation, projects will not be able to attract capital.⁴⁴³ The higher
12 expected earnings are achieved by awarding a risk premium into the future. The
13 Carriers cite the pharmaceutical industry, wildcat oil wells, and telecommunications
14 satellites as examples of efforts where the occasional success must "pay for" the many
15 failures.⁴⁴⁴

16 Although these examples are not from industries with similar business
17 risks as to TAPS, in each case the compensation for the risk of project failure is
18 recovered after the risk is resolved.⁴⁴⁵ In the first two cases the risk of the endeavor is
19 usually covered by a business undertaking many such endeavors and "self insuring." In
20
21

22 ⁴⁴¹This point is clear from an examination of the underlying calculations in
23 WBT-49.

24 ⁴⁴²T-3 (WBT) 42; T-10 (WBT) 34.

25 ⁴⁴³T-10 (WBT) 34.

26 ⁴⁴⁴T-3 (WBT) 44-45.

⁴⁴⁵T-3 (WBT) 45.

1 the latter case insurance premiums to cover the risk of failed satellite launches are
2 directly included in the costs consumers pay.⁴⁴⁶

3 Tesoro asserts that there should be no risk premium in current rates for
4 any extraordinary past risks associated with TAPS.⁴⁴⁷ Tesoro reasons that because
5 ratemaking is prospective, compensating TAPS investors for past risks would be
6 retroactive ratemaking.⁴⁴⁸ While some risk premium was necessary in the past,
7 investors would or should have received acknowledgment of them through appropriate
8 rates of return in the past. Tesoro reasons that the rates for 1997-2000 should
9 therefore not include a risk premium.⁴⁴⁹

10 Williams asserts that we need not provide an additional return premium to
11 maintain the value of existing capital or to attract additional capital prospectively.⁴⁵⁰
12 Williams reasons that the rate of return used to establish rates must reflect current risks;
13 if it does so the company will be able to attract future capital.⁴⁵¹ Williams explains that
14 the value of capital already committed will be maintained so long as there is a
15 reasonable expectation that the allowed return will be achieved.⁴⁵² Nevertheless,
16 Williams asserts that "it would be reasonable to provide a premium in the current TAPS
17 rate of return to recognize" the early-year special TAPS risks.⁴⁵³

20 ⁴⁴⁶T-3 (WBT) 45.

21 ⁴⁴⁷FJH-T (E-2) 64.

22 ⁴⁴⁸FJH-T (E-2) 64. See also Endnote 6.

23 ⁴⁴⁹Tr. 4935 (FJH).

24 ⁴⁵⁰JSG-T (W-2) 39.

25 ⁴⁵¹JSG-T (W-2) 38-39.

26 ⁴⁵²JSG-T (W-2) 39.

⁴⁵³JSG-T (W-2) 39.

1 We find that it is appropriate to award a risk premium after the relevant
2 risks have passed. Considering TAPS on a stand-alone basis suggests recognizing
3 that TAPS was a unique all-or-nothing gamble. If investors need to be compensated for
4 an all-or-nothing gamble for only a short period, then the risk premium during that time
5 will be larger. It is more equitable to have later-year ratepayers shoulder some of these
6 extraordinary capital costs because they receive benefits from the pipeline's
7 construction.

8 Moreover, we are persuaded by the Carriers' arguments that markets
9 sometimes continue to reward risk taking investors after the risks have passed. Bonds
10 continue to pay a return premium if extraordinary risks were present at bond
11 issuance.⁴⁵⁴ Further, if the Carriers could have obtained insurance for construction-era
12 risks, the cost of that insurance would have been included in rates and recovered long
13 after the risks passed.⁴⁵⁵ Finally, in competitive markets, the value of a stock once a
14 risk is favorably resolved is greater than when the risk is still present. If initial investors
15 are confident that regulators will mimic this dynamic and allow them this greater value
16 then the enterprise will have an easier time attracting capital at reasonable rates.⁴⁵⁶

17 Having resolved protestants' objections, we find that the Carriers'
18 method⁴⁵⁷ of translating risk into a rate of return premium is reasonable.⁴⁵⁸ We
19 disagree, however, with the Carriers' assessment of the relevant inputs. We do not
20

21 ⁴⁵⁴T-10 (WBT) 49.

22 ⁴⁵⁵Tr. 2950-51 (WBT).

23 ⁴⁵⁶See Tr. 2951-52 (WBT).

24 ⁴⁵⁷See WBT-49.

25 ⁴⁵⁸We also recognize that it is imperfect. The Carriers' method fails to address
26 the sum of risks to partial, rather than complete, capital loss. To capture risk of partial
loss, we adjust upward the risk of "total loss" used in our calculation of the appropriate
risk premium.

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1 accept the Carriers' estimate of the risk of principal loss, nor their base line, non risk-
2 adjusted rate of return to which the risk premium is applied, nor their assessment of the
3 period over which the risk premium is recovered. Instead, our findings regarding
4 relevant inputs and their application to the Carriers' method are discussed below.

5 Based on the record and our analysis at Endnote 8, we find that, before
6 May 1, 1974, investors may have perceived a roughly 50 percent likelihood that the
7 project would not be completed. Accordingly, investors in a stand-alone pipeline before
8 this date faced a significant chance of failing to receive, not only an adequate return on,
9 but also the return of their principal investment. The return on capital expended before
10 May 1, 1974, should therefore be adjusted to reflect this extraordinary risk. This
11 adjustment should only be applied to equity capital because we have found that a
12 stand-alone pipeline would have been financed with only equity during this period.⁴⁵⁹

13 Investors provided \$514 million towards TAPS construction before May 1,
14 1974.⁴⁶⁰ However, not all of this money was at risk. During Phase I of the original
15 TAPS litigation, State witness Parcell pointed out that a significant portion could have
16 been recouped. "[A]t the beginning of 1974 only about \$451 million had been
17 committed to the TAPS project. When allowances for salvage values and tax savings
18 effects are taken into consideration, the net commitment falls to \$137 million."⁴⁶¹ The
19 first \$514 million (rather than the \$451 million to which Parcell refers) was exposed to
20 significant non-completion risk. Parcell's ratio of capital at risk to total capital expended
21
22

23 ⁴⁵⁹Our earlier finding that the pipeline would have been capitalized with 100
24 percent equity until May 1, 1974, was also based upon the considerable risks of non-
completion that investors in a stand-alone pipeline would have faced.

25 ⁴⁶⁰143-RGV-C, Workpaper TAPS-RGV WP3.xls, Schedule 3.

26 ⁴⁶¹WBT-67-E (Parcell) 44.

1 is roughly 30.38 percent.⁴⁶² It is reasonable to expect that a similar ratio applied to the
2 incremental \$63 million in expenditures made from January through April of 1974.
3 Accordingly, we find that \$156.138 million⁴⁶³ of original investor capital was subject to
4 extraordinary risk associated with legal and other institutional hurdles.⁴⁶⁴ When
5 compared to total equity expenditures of roughly \$3.909 billion during the construction
6 phase (based on our finding of a 50.5 percent equity structure), this amounts to four
7 percent of total equity capital. Our finding that there was a 50 percent chance of total
8 capital loss before construction began thus translates to a two percent chance (50
9 percent of 4 percent) of total project equity capital loss.⁴⁶⁵

10
11 ⁴⁶²Parcell suggested that true capital exposure was \$137 million, while total
12 capital expenditures were \$451 million. The ratio of capital exposure to total
13 expenditure is thus 137/451, or 30.38 percent.

14 ⁴⁶³\$156.138 million results from multiplying \$514 million by 30.38 percent.

15 ⁴⁶⁴In the Phase I litigation, Carrier witness Patton suggested that the planning
16 and pre-construction era risk needs to be applied to all subsequent construction capital.
17 He explains:

18 [A]t least by the late Fall of 1973, the Owners were for all intents and
19 purposes obligated, as a matter of political reality and economic fact, to
20 undertaking the Project, notwithstanding the risks and unresolved
21 uncertainties that still existed regarding negotiation of the PLA, securing
22 design criteria approvals and the like.

23 WBT-16 (Patton) 95.

24 We find Patton's assessment incorrect. Taken literally, it suggests that the
25 Carriers would have been willingly derelict in their duties to shareholders and would
26 have refused to stop construction if doing so was appropriate.

Patton's view is contradicted by his claim that he had advised the TAPS owners
that Alyeska was considering a complete shutdown if progress was not made with the
Teamsters Local by the first week of April, 1974. WBT-16 (Patton) 8. The stated
willingness to stop capital expenditures on the project illustrates the willingness of the
Carriers to act rationally in the face of future threats and demonstrates that a risk of total
construction capital loss did exist. Although the Carriers make theoretical arguments as
to how investors' funds can become irreversibly committed even in the face of
foreseeable loss, the record does not suggest that investors were indeed in such a
position after April, 1974. WBT-29 (Arrow) 27-29; Tr. 2641-42 (WBT).

⁴⁶⁵See T-3 (WBT) 48-49 for a similar style of calculation, although with different
inputs.

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1 In addition to the extraordinary risks during the planning phase, we find
2 that during the entire construction period equity investors faced some additional risk of
3 capital recovery, both on and of investment, from economic risks. Roseman's testimony
4 that TAPS could be expected to generate funds sufficient to cover debt service under
5 almost any scenario is persuasive.⁴⁶⁶ However, equity investors did face additional
6 risks, "because stockholders' claims are subordinated to those of lenders when the firm
7 issues debt, the risks faced by stockholders are magnified."⁴⁶⁷ Although equity
8 investors' total exposure was comparatively modest, we find that it was nevertheless
9 present. After a complete review and analysis of the record, we find that construction-
10 era equity investors faced an additional five-percent probability⁴⁶⁸ on top of risks borne
11 by the average pipeline of losing half of their investment. To use the Carriers' method
12 for calculating a risk premium, this five-percent probability is translated into a 2.5
13 percent probability of losing the entire equity investment.⁴⁶⁹ We add this risk premium
14 to all equity investment made until the pipeline became operational. The Carriers⁴⁷⁰ and
15 Williams⁴⁷¹ adopt an operational date for TAPS of July 1, 1977; Tesoro does not
16 sponsor a date for when the pipeline began operations. Because the date of initial
17 operations are uncontested, we use July 1, 1977 as the start of operations.

18
19 ⁴⁶⁶See 66-WBT-E (Roseman) 68-75.

20 ⁴⁶⁷WBT-60 at 2.

21 ⁴⁶⁸The early construction period generated risks somewhat greater than this for
22 equity investors, while the later construction periods generated somewhat lower risks.
Given that these risks cannot be measured with precision (T-3 (WBT) 50), we find
determining an average risk premium over the entire pre-operational period reasonable.

23 ⁴⁶⁹See T-3 (WBT) 48-49 for example of translating a risk of partial loss to a
smaller risk of total loss.

24 ⁴⁷⁰See 143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls, Schedule 3, I. 106.

25 ⁴⁷¹See 189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls, Schedule 3, I.
26 106.

1 Having determined the extraordinary risk to which planning and
2 construction era equity capital were exposed, we must determine the baseline, non-risk
3 adjusted return required for such capital investments. Given our findings from Part IV
4 Section B.3, from 1968 through 1974, the non risk-adjusted cost of equity capital
5 averaged 12.31 percent.⁴⁷² Similarly, our findings from Part IV Section B.3 indicate that
6 the non risk-adjusted cost of equity capital from 1968 through 1977 averaged 12.63
7 percent.⁴⁷³

8 Finally, we must decide to what capital and for what length of time the risk
9 premium should be applied. Although the Carriers posit a horizon of 34.5 years,
10 investors were aware at the time of investment that TAPS rates were initially set using a
11 25-year depreciation schedule.⁴⁷⁴ We therefore adopt a 25-year time over which to
12 apply risk factor to equity capital.

13 We use the Carriers' methodology with adjusted inputs to determine a risk
14 premium. That risk premium is 33 basis points for the original TAPS investors who
15 provided capital from 1968 through May 1, 1974.⁴⁷⁵ It is applied to *all* equity capital for
16 the 25-year period 1977 through the middle of 2002. We add an *additional* 42 basis

17
18 ⁴⁷²Based on the arithmetic average of our findings for appropriate return on
19 equity for 1968-1974; see Exhibit 19, Schedule 1.

20 ⁴⁷³Based on the arithmetic average of our findings for appropriate return on
21 equity for 1968-1977; see Exhibit 19, Schedule 2.

22 ⁴⁷⁴See 106-RGV-E. We attempt to provide a premium that makes equity
23 investors whole with regard to risks experienced during the planning and construction
24 eras. Accordingly, it is appropriate to adopt the time horizon that these initial equity
25 investors expected because that is the time period over which they might have hoped to
26 recover such a premium. Neither Tesoro nor Williams proposed time horizons that met
this requirement. See n.412 and n.416, *supra*.

⁴⁷⁵Exhibit 19, Schedule 1. The 33 basis points is adjusted from 36 basis points to
recognize that roughly 90 percent of the equity capital expended to date comes from the
original construction period. T-3 (WBT) 50. The rationale for such leveling was detailed
during cross-examination. Tr. 2935-36 (WBT).

1 point risk premium to correspond to the risk faced by original TAPS investors who
2 provided equity capital from 1968 through July 1, 1977.⁴⁷⁶ This risk premium is also
3 applied to all equity capital for the 25-year period 1977 through the middle of 2002.
4 Thus, the total risk premium to be added to return on equity is 75 basis points.⁴⁷⁷ The
5 full, appropriate return on equity that combines the special TAPS risk premium with the
6 non risk-adjusted equity rate of return is calculated at Exhibit 20. The overall weighted
7 rate of return on rate base is calculated at Exhibit 2.

8 5. Allowance for Funds Used During Construction

9 Allowance for Funds Used During Construction (AFUDC) is allowed in
10 modern ratemaking to compensate investors for funds expended to construct pipeline
11 facilities before the facilities are used to deliver services.⁴⁷⁸ To calculate AFUDC for the

13 ⁴⁷⁶Exhibit 19, Schedule 2. Again, the 42 basis points reflects adjustment from 46
14 basis points in recognition that on a leveled basis roughly 90 percent of the equity
15 capital expended to date comes from the original construction period. T-3 (WBT) 50.

16 ⁴⁷⁷Without adjusting for a leveled rate base that also contains new, less risky
17 capital, these calculations suggest an overall risk premium on original capital
18 expenditures of 82 basis points. This conforms closely to the equity risk premium of
19 one percent, provided by the APC. See *Re Exxon Pipeline Co.*, 1 APUC 580, 601
20 (1980). The Alaska superior court, in its remand of *Re Exxon Pipeline Company*
21 asserted that risks associated with construction cost overruns were fully subsumed
22 within the rate base. *State of Alaska v. Alaska Pub. Util. Comm'n*, 3AN 80-7163 CI
(Alaska Super.) Nov. 28, 1983, vacated by *Amerada Hess Pipeline Corp. v. Alaska Pub.*
23 *Util. Comm'n*, No. S-195, slip op. (Alaska Nov. 20, 1985) at parties' request due to
24 settlement. The Alaska Superior court may not have recognized that cost-overruns
25 were only part of the risks facing TAPS. Moreover, while actual cost overruns were
26 included in rate base, the threat of cost over-runs served to create some small but non-
zero uncertainty for equity investors as to whether the economics of the pipeline might
prevent full equity capital recovery.

⁴⁷⁸AFUDC allows for recovery of interest on both debt and equity funds used
during construction. In *Re Exxon Pipeline Company*, the APC awarded the TAPS
Carriers actual booked original cost including Interest During Construction (IDC). 1
APUC 580, 591 (1980). IDC allows only for recovery of interest on debt costs. In doing
so, the APC followed the old Interstate Commerce Commission approach that provided
only IDC for oil pipelines. The use of AFUDC instead of IDC is now well settled and we
calculate it for the TAPS.

1 TAPS, we determine the AFUDC balances to be used and the schedule for
2 compounding.⁴⁷⁹ The parties present different methodologies for determining AFUDC.

3 Tesoro uses end-of-year Construction Work in Progress balances against
4 which AFUDC is calculated, as well as annual compounding, but provides little
5 reasoning for doing so.⁴⁸⁰ The Carriers calculate AFUDC against year-average
6 Construction Work in Progress balances, and compound AFUDC balances semi-
7 annually. They assert that this is consistent with FPC Order 561.⁴⁸¹ Williams agrees
8 with the Carriers.

9 The APUC directed in *Cook Inlet* that “AFUDC should be calculated in
10 accordance with the formula set out in FPC Order No. 561.”⁴⁸² The FPC approach
11 permits AFUDC to be calculated against average year Construction Work in Progress
12 balances. FPC Order 561 also directs that compounding should be done no more
13 frequently than semi-annually.⁴⁸³ By directing that AFUDC should be calculated
14 pursuant to Order 561, the APUC in *Cook Inlet* allowed for semi-annual compounding.
15 We see no reason to deviate from that precedent. We adopt the average year balance
16

17
18
19 ⁴⁷⁹The size of AFUDC balances will be larger the more frequently it is
20 compounded.

21 ⁴⁸⁰Tesoro adopts the TSM’s AFUDC amounts at the beginning of pipeline
22 operations. See 225-JFB-T. That balance was calculated using end of year
23 Construction Work in Progress balances. See 31-BWF-E. Tesoro also suggests that
24 we should use ADIT as an offset when we calculate AFUDC. While this approach may
25 be theoretically more accurate than the one we adopt, we lack a record sufficient to
26 allow us to make that calculation.

⁴⁸¹Tr. 3609 (RGV).

⁴⁸²*Re Cook Inlet Pipe Line Co.*, 6 APUC 527, 543 (1985).

⁴⁸³226-JFB-T.

1 and semi-annual compounding previously adopted by the APUC. We adopt the
2 resulting amounts for AFUDC as calculated at Exhibit 21.⁴⁸⁴

3 C. Depreciation

4 We found that the Carriers' use of straight-line depreciation was
5 inappropriate in Part III, *supra*. Our goal is to set cost-based rates. We found in Part III
6 Section C that the TSM depreciation schedule provides the Carriers with an opportunity
7 to recover their capital investment and safeguards shippers from paying twice for the
8 Carriers' investment. In this section, we refine our finding on the use of TSM
9 depreciation to determine the remaining rate base at year-end 1996, and calculate the
10 depreciation charges that result for each year. We then describe how we calculate
11 retirements from accumulated depreciation. Finally, we explain how the AFUDC
12 balances are amortized.

13 1. TSM Depreciation Charges Should Be Adopted

14 There are several issues that are addressed in this subsection. First, we
15 determine whether TSM depreciation charges or factors should be used. Second, we
16 explain the use of TSM-6 depreciation for the years 1977-1984. Third, we explain how
17 we included TSM's amortization of excluded costs to calculate investment recovery.

18
19
20 ⁴⁸⁴Tesoro urges that we incorporate accumulated deferred income taxes (ADIT)
21 as a source of cost-free capital in our calculation of AFUDC. JFB-T (E-3) 48; *Tesoro*
22 *Alaska Company's Posthearing Reply Brief* at 31-32. We do not do so for two reasons.
23 First, most of the AFUDC is accumulated before the pipeline went into operation and
24 there is no ADIT during that period. Tr. 5355-56 (JFB). Second, including ADIT in the
25 AFUDC calculations from 1977-1996 only makes a difference to shippers to the extent
26 that AFUDC is booked by compounding semi-annually, because using ADIT to fund
AFUDC reduces the AFUDC balance but increases the return on rate base. Witnesses
agreed that the size of AFUDC had a *de minimus* impact on the revenue requirements
and rates during the protested years. JFB-T (E-3) 50. Administrative simplicity does
not support Tesoro's approach.

1 Tesoro suggested that the rate base against which we test 1997-2000
2 filed rates should be calculated with reference to historical TSM depreciation *charges*.⁴⁸⁵
3 Williams urged that the rate base be determined with reference to TSM depreciation
4 *factors*.⁴⁸⁶ The depreciation charges that Williams derives from these factors differ from
5 the TSM depreciation charges. Thus, protestants raise the issue of which "TSM based"
6 depreciation figures should be used.

7 The TSM charges are more appropriate to use as a measure of the
8 opportunity that Carriers have historically enjoyed to recover their investment. The
9 depreciation factors upon which Williams relies have never been used to set rates, were
10 not used to reconcile the TSM starting rate base, and were never presented to any
11 regulatory body. The TSM depreciation charges, however, meet all these criteria and
12 were recognized by the settling parties as a vehicle for investment recovery. We find
13 TSM depreciation charges more reasonable.

14 The Carriers have urged that using TSM depreciation charges to set rate
15 base for 1997-2000 is inappropriate, because TSM itself contained no depreciation
16 charges for 1977-1983.⁴⁸⁷ Instead, the Settlement Agreement set a starting rate base
17 for 1983 year-end,⁴⁸⁸ and determined depreciation charges for 1984 through the
18 present.⁴⁸⁹ The depreciation charges upon which Tesoro relies are contained in an
19 illustrative exhibit, known as TSM-6.⁴⁹⁰

21 ⁴⁸⁵ See 225-JFB-T.

22 ⁴⁸⁶ See 189A-BEW-T.

23 ⁴⁸⁷ See Tr. 4518-21 (BEW).

24 ⁴⁸⁸ See BWF-2 at 14; BWF-3 at 59.

25 ⁴⁸⁹ See BWF-3 at 55. The Settlement specifies depreciation *factors* through
26 2011.

⁴⁹⁰ 31-BWF-E.

1 We acknowledge that the TSM-6 depreciation charges were not directly
2 used to set tariffed rates for 1977-1983. Rather, until the Settlement was brokered,
3 rates were still being charged according to the originally filed and suspended rates from
4 1977.⁴⁹¹ However, the question concerning TSM-6 depreciation charges is not whether
5 they were used as a means of revenue collection, but whether they provided the
6 Carriers with a reasonable opportunity to recover their investment.

7 The TSM-6 depreciation charges are the same as those presented by
8 ARCO witness Baden to the APUC in support of the Settlement.⁴⁹² In explaining his
9 schedule, which reconciles FERC Form 6 data to the 1984 starting values in the TSM,
10 Mr. Baden explained that “the TSM numbers do have real numbers behind them,”⁴⁹³
11 and that his purpose was “to show the trail from the Form 6 data or the TAPS record to
12 the TSM stipulated number.”⁴⁹⁴ The State of Alaska and the U.S. Department of Justice
13 represented that refunds under the Settlement were determined according to the TSM-6
14 revenue requirements for 1977-1984.⁴⁹⁵ Thus, the record shows that the Carriers and
15 the APUC relied on the TSM-6 depreciation charges to arrive at and accept the
16 Settlement’s starting rate base.

17 Because the Carriers and the APUC relied on the TSM-6 depreciation
18 charges, they fairly represent the Carriers’ opportunity for investment recovery. When
19 the APUC approved the Settlement Agreement, they made 1977-1985 rates
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22 ⁴⁹¹ See Tr. 4518-19 (BEW).

23 ⁴⁹² See 235-JFB-T; 31-BWF-E.

24 ⁴⁹³ See 236-JFB-T at 699.

25 ⁴⁹⁴ See 236-JFB-T at 699.

26 ⁴⁹⁵ See BWF-4 at 70.

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1 permanent.⁴⁹⁶ Although they did not assert that those rates were just and reasonable,
2 in making those rates permanent and in relying upon the reconciliation of FERC Form 6
3 to TSM-6 data to do so, the APUC closed the book on considering any other
4 depreciation charges for those years. As a witness for Williams noted, the depreciation
5 contained in TSM-6 was “analogous to setting a rate based on a suspension rate. In
6 other words, the Carriers had made a tentative filing under one rate methodology, and
7 the actual depreciation rates to be used were not established until later.”⁴⁹⁷ To accept
8 straight-line depreciation for 1977-1983 instead of the TSM-6 depreciation charges may
9 run afoul of the doctrine of retroactive ratemaking.⁴⁹⁸

10 We turn now to the issue of TSM’s amortization of excluded costs. The
11 Settlement excluded \$450 million of Carrier property from TSM’s rate base. However,
12 the Settlement Agreement amortized these excluded costs from 1978 through 1984.⁴⁹⁹
13 The TSM disks show that more than \$72 million was amortized in 1984.⁵⁰⁰ The full
14 amortization schedule is included in TSM-6.⁵⁰¹ Thus, the Settlement Agreement
15 allowed no return *on* the \$450 million, but did permit a return *of* the \$450 million.⁵⁰²

16 To set depreciation charges for 1977-1996, we determine the opportunity
17 that the Carriers have enjoyed to recover their investment. We found that the TSM and
18 TSM-6 depreciation amounts better represent this opportunity than the Carriers’ FERC
19 Form 6 books and records. To be consistent, we add the \$450 million rate base

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21 ⁴⁹⁶*Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 170 (Alaska P.U.C. May 30, 1987).

22 ⁴⁹⁷Tr. 4519 (BEW).

23 ⁴⁹⁸*Tesoro Alaska Company’s Initial Posthearing Brief* at 30-31.

24 ⁴⁹⁹BWF-3 at 14.

25 ⁵⁰⁰31-BWF-E.

26 ⁵⁰¹31-BWF-E.

⁵⁰²29-ABJ-W at 10.

1 exclusion to the TSM and TSM-6 depreciation charges for 1978-1984.⁵⁰³ The yearly
2 amounts that we adopt for depreciation and accumulated depreciation used to
3 determine the year-end 1996 rate base are set forth in Exhibit 22.

4 2. Retirements From Accumulated Depreciation

5 When property is retired from service, generally the accumulated
6 depreciation associated with that property to date is removed from the total
7 accumulated depreciation account.⁵⁰⁴ The Carriers' data for retirements from
8 accumulated depreciation reflect FERC Form 6 depreciation.⁵⁰⁵ It thus reflects straight-
9 line depreciation for plant of different vintages and with different expected lives.
10 Williams assumes that accumulated depreciation amounts are unaffected by
11 retirements⁵⁰⁶ and makes no deductions from accumulated depreciation, even though
12 they take retirements from gross depreciable property. Tesoro adopts the TSM
13 approach and reports only net retirements.⁵⁰⁷

14 We find the various data presented on retirements from accumulated
15 depreciation to be inconsistent with our finding that TSM depreciation should be used to
16 calculate the 1996 rate base. The Carriers' data reflect straight-line depreciation,⁵⁰⁸
17 while the TSM depreciation amounts imply a more accelerated depreciation schedule.
18 With an accelerated depreciation schedule, accumulated depreciation balances should
19

20 ⁵⁰³In Part IV Section A(1), we found that the Settlement's \$450 million should not
21 be disallowed from rate base. By adding add the \$450 million rate base exclusion to the
22 TSM and TSM-6 depreciation charges for 1978-1984, we provide for both the return on
23 and of this investment.

24 ⁵⁰⁴Tr. 5137 (JFB).

25 ⁵⁰⁵See 143-RGV-C. Workpaper TAPS RGV-WP3.xls, Schedule 12, I. 12.

26 ⁵⁰⁶189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls, Schedule 12.

⁵⁰⁷See 225-JFB-T.

⁵⁰⁸143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls, Schedule 2, I. 19.

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1 be reduced more than suggested by the Carriers' data. Williams' approach is not
2 appropriate because accumulated depreciation should reflect retirements of Carrier
3 property. Tesoro's data cannot be used, given our finding that the FERC Form 6
4 retirements data are more appropriate.⁵⁰⁹

5 The more rapid depreciation schedule that we adopt needs to be imposed
6 on property that has a shorter life than 34.5 years (the stipulated life of the TAPS).
7 Because the record does not provide adequate information on the vintage of the retired
8 property, we referred to individual Carriers' annual reports filed with us. Supplemental
9 pages to the FERC Form 6, added after the Settlement, contain information on
10 retirements by vintage year, as well as charges to accumulated depreciation that reflect
11 those retirements.⁵¹⁰

12 For 1977 through 1996, for each retirement from vintage year, we
13 determine the expected life of property retired by dividing the number of years of service
14 by the ratio of FERC Form 6 charges to accumulated depreciation to retirements. For
15 retirements prior to 1986 there are no supplemental pages. Having no information
16 regarding vintage year, we treat retirements from accumulated depreciation in the
17 aggregate. For all retirements from all years, we then use TSM depreciation charges to
18 impose the implied depreciation profile on shorter-lived assets. This allows us to derive
19 retirements from accumulated depreciation that are adjusted for the more rapid
20 depreciation schedule that we adopt.⁵¹¹

21
22 ⁵⁰⁹Part IV Section A.4.

23 ⁵¹⁰Although the Carriers are not always consistent in their numbering of the
24 Supplemental pages, in general the vintage year data on retirements are contained on
25 Supplemental page 9. Aggregate retirements data are contained on Supplemental
26 pages 1-3.

⁵¹¹Exhibit 23.

1 3. Amortization of AFUDC

2 AFUDC balances are traditionally amortized consistently with the
3 depreciation schedule because both depreciation and amortization of AFUDC are
4 methods for recovery of capital. Williams⁵¹² and Tesoro⁵¹³ amortize AFUDC using the
5 TSM depreciation factors. The Carriers amortize AFUDC based on the relationship
6 between depreciation expense and net carrier depreciable property.⁵¹⁴

7 The rate at which AFUDC is amortized should match the rate at which
8 Carrier property is depreciated. Accordingly, we follow the Carriers' approach, and
9 derive amortization factors for AFUDC based on the relationship between the
10 appropriate depreciation expense and net carrier property. The amortization factors
11 were used to calculate the amortization of AFUDC, both debt and equity portions.⁵¹⁵
12 Exhibit 24 shows the derivation of the amortization factors, and Exhibit 25 illustrates the
13 amortization of AFUDC.

14 D. Accumulated Deferred Income Taxes

15 ADIT is used by regulators to adjust rates for the difference in timing of
16 depreciation for ratemaking and tax purposes. We use TSM depreciation charges for
17 ratemaking, see Part IV, *supra*. For tax depreciation, we follow the approach taken by
18 the parties⁵¹⁶ and assume the most accelerated methods of tax depreciation allowed,
19

20 ⁵¹²189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls.

21 ⁵¹³225-JFB-T.

22 ⁵¹⁴T-4 (RGV) 10.

23 ⁵¹⁵The Carriers (143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls), Williams
24 (189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls), and Tesoro (compare
25 225-JFB-T and 31-BWF-E) amortize additions to AFUDC balances on a beginning-of-
26 year basis; that is, the amortization factors are applied additions to AFUDC in the year
in which additions are made. We follow this approach.

25 ⁵¹⁶See, e.g., T-7 (RGV) 12; 189A-BEW-T Workpaper BEW_R_RGV WP1 DR
26 22RE.xls, Schedules 6-7; 225-JFB-T, Workpaper 2.

1 i.e., that maximum depreciation charges allowed by state and federal tax law are
2 taken.⁵¹⁷ Consistent with a stand-alone income tax calculation, we follow the parties
3 and assume that income is sufficient to be taxed at the highest statutory rate,⁵¹⁸
4 recognizing relevant changes in income tax rates⁵¹⁹ and laws.⁵²⁰ Finally, we follow the
5 approach used by all of the parties and do not reduce outstanding ADIT balance to
6 reflect changes in deferred taxes associated with property retirements.⁵²¹ We calculate
7 an ADIT balance for 1977-1996 at Exhibit 28.

8 E. Having Established All Necessary Inputs, We Calculate Reasonable Annual
9 Rate Bases for 1977-1996

10 We can now calculate a reasonable rate base for year-end 1996. The
11 value of original carrier property in service at commencement of service (July 1, 1977) is
12 determined in Part IV Section A (Exhibit 8). That balance includes both depreciable and
13 non-depreciable property. To provide AFUDC rather than just interest during
14 construction (IDC), IDC is subtracted from FERC Form 6 figures for gross Carrier
15 property.⁵²² The working capital balance (Exhibit 9) is added to obtain the value of

16 ⁵¹⁷Exhibit 26, Schedules 1 and 2 show the State and Federal tax depreciation,
17 respectively, used to calculate ADIT balances.

18 ⁵¹⁸See, e.g., T-7 (RGV) 11.

19 ⁵¹⁹See, e.g., T-7 (RGV) 12.

20 ⁵²⁰Exhibit 27 shows the calculation of an adjustment to tax depreciation caused
21 by the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA, Pub.L. 97-248,
22 Sept. 3, 1982, 96 Stat. 324). The TAPS Carriers and Williams recognize a TEFRA
23 Adjustment to tax depreciation (see 143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls
24 and 189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls, respectively), while
25 Tesoro does not (see 225-JFB-T). The parties did not explain why a TEFRA adjustment
26 should or should not be made. We include the TEFRA adjustment as it better conforms
to Federal statute.

23 ⁵²¹See, e.g., T-7 (RGV) 12. Carriers note that this tends to result in the highest
24 ADIT balance possible, and thus the largest reduction in rate base.

25 ⁵²²We follow the Carriers' and Williams' (e.g. 189A-BEW-T) approach in this
26 regard. See, e.g., T-7 (RGV) 11; 189A-BEW-T Workpaper BEW_R_RGV WP1 DR
22RE.xls

1 original carrier property in service. The AFUDC as of commencement of service is
2 determined in Part IV Section B (Exhibit 21). To compute a rate base for year-end
3 1977, the 1977 additions to Carrier property are added and the 1977 retirements of
4 Carrier property (Exhibit 8) are subtracted. The amount of depreciation charged for
5 1977 is subtracted from the value of Carrier property and AFUDC. AFUDC is amortized
6 (Exhibit 25) according to an annual depreciation factor (Exhibit 24) that is based on the
7 relationship between depreciation expenses and net Carrier property. Finally, in
8 accordance with standard ratemaking practice, we deduct the ADIT balance for 1977 as
9 determined in Part IV Section D (Exhibit 28). The rate base for year-end 1977 is \$9.533
10 billion, shown at Exhibit 29, line 18.

11 Rate base at year-end for each of the years following is calculated by
12 beginning with the balances at the end of the previous year, adding additions to Carrier
13 property, subtracting retirements of Carrier property, annual TSM depreciation charges,
14 and ADIT. The calculation of rate base at each year-end is depicted in Exhibit 29.⁵²³
15 We find that the year-end 1996 rate base is \$669 million, shown at Exhibit 29, line 18.

16
17 V. WE USE A COMPARATIVE REVENUE REQUIREMENT ANALYSIS TO
18 CONFIRM THAT THE \$669 MILLION YEAR-END 1996 RATE BASE DOES NOT
19 CONFISCATE CARRIER PROPERTY

20 In *Kenai*, the APUC found that if a switch in ratemaking methodologies
21 imposed a regulatorily enforced return deficiency⁵²⁴ then an upward adjustment to rate

22 ⁵²³Normally, the Commission requires the use of a 13-month average rate base.
23 However, the record does not contain precise monthly rate base information. Because
24 the effort costs required to calculate monthly rate base balances for TAPS would be
25 much greater than the benefits conferred, we calculate both year-end and average-year
26 rate bases, where the "average-year" rate base is calculated as the average of the rate
base as of the beginning and the end of a given year. See, e.g., T-7 (RGV) 12.

⁵²⁴*Re Kenai Pipe Line Co.*, 12 APUC 425, 438, 1992 WL 696192 (Alaska P.U.C., 1992).

1 base might be made.⁵²⁵ Such an adjustment is known as a “transition rate base.”
2 Transition rate bases ensure that no regulatory taking occurs and that carriers are
3 provided an opportunity to recover their investment.⁵²⁶

4 The APUC explained in *Kenai*⁵²⁷ how to determine the amount, if any, of a
5 regulatorily enforced return deficiency.

6 If, cumulatively, KPL had been entitled to earn less under the
7 valuation methodology than it would have been allowed under DOC, it could
8 argue for a transition rate base in excess of original cost.
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21 ⁵²⁵Equity suggests that if a switch in methodologies granted an excessive return
22 opportunity to recover investment, then a downward adjustment to rate base might be
23 made to ensure that shippers do not face the same opportunity for carriers to recover
24 costs twice. See T-10 (WBT) 84.

25 ⁵²⁶Such adjustments do not run afoul of the rule against retroactive ratemaking.
26 They are not made on the basis of past rates but on the basis of allowable revenue
requirements.

⁵²⁷*Re Kenai Pipe Line Co.*, 12 APUC 425, 439-40, 1992 WL 696192 (Alaska
P.U.C., 1992).

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1 Under this approach, we compare the revenue requirements used to set the filed rates
2 generated by TSM⁵²⁸ with the revenue requirements produced by a DOC analysis
3 applied with reasonable inputs consistently from the beginning of pipeline operation. A
4 transition rate base might be awarded if, cumulatively, the two methodologies yield
5 significantly different revenue requirements.

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11 ⁵²⁸The Settlement did not specify a revenue requirement for the years 1977-
12 1984. Rather, it set rates. Specifically, the Settlement made the originally-filed 1977
13 rates permanent for 1977-1981; refunds were made for rates from 1982-1985.
14 Nevertheless, in explaining the Settlement to regulatory bodies when seeking its
15 approval, the Carriers relied upon the TSM-6 spreadsheet model, which illustrated TSM
16 contained annual revenue requirements for those years. See 236-JFB-T at 697;
17 30-BWF-E. Those revenue requirements reflect property balances that were reconciled
18 to FERC Form 6 books and records. See 235-JFB-T and 236 JFB-T. Close
19 questioning by Commissioners suggests that the APUC at the time relied upon that
20 reconciliation, at least in part, in allowing filed rates for 1977-1984 to go into effect on a
21 permanent basis. Moreover, refunds were made on the basis of the TSM-6 model.
22 BWF-4 at 67. Accordingly, because the TSM-6 revenue requirements appear to have
23 been relied upon in the acceptance of the Settlement, refunds, and making filed rates
24 permanent, they are the appropriate benchmark against which to assess our
25 appropriate DOC revenue requirements for any return deficiency. We note that the
26 Carriers themselves evaluate the revenue requirements produced by their benchmark
DOC against TSM and TSM-6 revenues. See ABJ-19.

Assessing cumulative DOC revenue requirements against the TSM-6 revenue
requirements rather than actual revenues, as do the Carriers, modestly sways the
analysis in the Carriers' favor. Actual revenues generated by originally filed rates for
1977-1981 were cumulatively \$169 million more than the TSM-6 revenue requirements,
while revenues for 1982-1984 were cumulatively \$137 million more. Compare
143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls with 31-BWF-E. Accordingly, DOC
revenue requirements are more likely to cumulatively exceed TSM-6 revenue
requirements in this period than cumulative historical revenues. Thus, we use the TSM-
6 revenue requirement to insure that a regulatory taking does not occur when we adopt
a \$669 million rate base for year-end 1996. Reliance on TSM-6 revenue requirements
protects Carriers against the possibility of regulatory taking better than looking to actual
revenues.

1
2 Returns in excess of allowed DOC returns in some years offset return
3 deficiencies in other years. In order to be able to argue for a rate base
4 adjustment a net deficiency over the entire period during which the previous
methodology was in effect must be demonstrated.

5 *Kenai*.⁵²⁹ We perform a comparative yearly revenue requirement analysis to determine
6 whether the \$669 million rate base established for year-end 1996 is reasonable or
7 needs adjustment.

8 A. We Calculate Past Annual Revenue Requirements Using a DOC
9 Methodology

10 An annual comparative revenue requirement analysis requires
11 determining the appropriate past annual revenue requirements. The revenue
12 requirement is expressed as: $RR = [r(V-D)] + [OE + d + t]$ where

13 RR = revenue requirement

14 r = after-tax return

15 V = sum of prudently incurred capital expenditures, allowance for funds
16 used during construction (AFUDC), and working capital

17 D = accumulated depreciation

18 OE = operating and maintenance expenses

19 d = annual depreciation charges

20 t = taxes.

21 ⁵²⁹*Kenai Pipe Line Co.*, 12 APUC 425, 472 at n.26, 1992 WL 696192 (Alaska
22 P.U.C., 1992). In *Kenai* the APUC was careful to explain that actual revenues under the
23 previous methodology were not an appropriate benchmark; rather, the benchmark was
24 maximum revenues that might be achieved under the prevailing rate setting
25 mechanism. The reasoning was that "if higher rates were permitted under the prevailing
26 methodology but the company chose not to raise its rates at that time for whatever
reason[,] [t]he company should not now be permitted to add its voluntary return
deficiency (as distinguished from a regulatorily enforced return deficiency) to rate base
for recovery in present rates." *Id.*

1 In Part IV we found all the necessary elements for calculating a DOC
2 methodology revenue requirement except annual operating expenses (OE), return on
3 rate base, and a tax allowance.

4 1. Operating Expenses

5 The parties dispute the actual allowable past operating expenses.⁵³⁰ The
6 Carriers' adopt as operating expenses those expenses described in the Carriers' books
7 and records, including FERC Form 6.⁵³¹ Tesoro, however, relies on the operating
8 expenses filed with the TSM⁵³² which have been used to set rates from 1984-2000.⁵³³
9 On a cumulative basis from 1977 through 1996, the FERC Form 6 operating expenses
10 exceed the TSM operating expenses by \$149.209 million.

11 There is no evidence in this record to reconcile the TSM and FERC Form
12 6 operating expenses. Carrier witness Folmar agreed that TSM operating expenses
13 represent "real operating expenses" and differ from the FERC Form 6 data (exclusive of
14 capitalized interest and DR&R) only in terms of an IRS imputed management fee, and
15 "one small stipulated amount by one of the Carriers."⁵³⁴ The IRS management fee
16 adjustment came to \$385,000 in 1997,⁵³⁵ the record does not indicate the size of the
17 adjustment in other years. The other "small stipulated amount" appears to refer to a

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20 ⁵³⁰See Exhibit 30 for a summary of the parties' positions on operating expenses.

21 ⁵³¹See T-7 (RGV) 14. Williams adopts the same operating expenses as the
22 Carriers.

23 ⁵³²For 1977 to 1983, Tesoro relies on operating expense data from TSM-6.
24 BWF-6 at 5-12.

25 ⁵³³See 30-BWF-E and BWF-6 at 5-12 which provide operating expenses from
26 1977-1983 (see 31-BWF-E).

⁵³⁴Tr. 2154 (BWF).

⁵³⁵See 99-RGV-E at 1-3.

1 management fee associated with ARCO Transportation Alaska.⁵³⁶ In 1997 this amount
2 was \$1.518 million.⁵³⁷ The record does not indicate the size of this adjustment to FERC
3 Form 6 operating expenses in other years.

4 Tesoro's cross-examination of the Carriers' expert witness suggests two
5 additional differences between the operating expense data sets. The FERC Form 6
6 data in 1994 may include the costs of two separate settlements related to the Exxon
7 Valdez oil spill litigation: one with the State and Federal governments for \$31.7 million,
8 the other with a class of private plaintiffs for \$98 million.⁵³⁸ It is also unclear whether the
9 FERC Form 6 operating expense data reflects the post-employment benefits other than
10 pensions (PBOP) settlement with the State and the public relations expenses
11 challenged in Docket P-94-1.⁵³⁹

12 We analyze these five differences in operating expenses. The record
13 does not indicate whether the IRS imputed management fee or the ARCO
14 Transportation Alaska adjustment are costs that were imprudently incurred or are not
15 properly included in rates. The record also does not suggest that these costs are not
16 properly ascribed to the operating expense category. Accordingly, we cannot conclude
17 that the Carriers erred by including these costs. We find that for purposes of our
18 comparative revenue requirement analysis these costs are properly included in
19 operating expenses.

20 With respect to the \$31.7 million that reflects the settlement with State and
21 Federal governments concerning the Exxon Valdez oil spill, the Carriers' 1994 operating

23 ⁵³⁶Tr. 3248-49 (RGV); see 99-RGV-E at 1-2.

24 ⁵³⁷99-RGV-E at 1.

25 ⁵³⁸Tr. 3257 (RGV).

26 ⁵³⁹*Id.*

1 expense data probably should be adjusted. Under the terms of that settlement, the
2 \$31.7 million payment could not be included in TAPS rates.⁵⁴⁰ However, the record is
3 ambiguous as to whether the FERC Form 6 data include this payment.⁵⁴¹ Accordingly,
4 we do not adjust the Carriers' operating expenses as being improper.

5 It is also unclear whether the Carriers' operating expenses for 1994 should
6 be adjusted to reflect the \$98 million settlement with private plaintiffs. Tesoro asserts
7 that the FERC and ultimately the District of Columbia Circuit Court of Appeals ruled that
8 the \$98 million was not includable in rates under the terms of the Settlement. However,
9 this decision had to do with the construction of the Settlement and not ratemaking.⁵⁴²
10 Tesoro has not presented evidence of imprudence regarding the private Exxon Valdez
11 settlement costs. We, therefore, do not exclude these costs from 1994 operating
12 expenses.

13 Finally, it is unclear whether the Carriers should have adjusted their FERC
14 Form 6 operating expense data to reflect the settlement agreement between the State
15 and the TAPS Carriers concerning PBOP.⁵⁴³ The protestants provided no substantive
16 rationale to explain why this settlement agreement should be binding on the Carriers for
17 the purpose of calculating operating expenses. In fact, in Order 52 the Commission
18 held: "The Settlement Agreement should be and is, by this Order, accepted by the
19 Commission, subject to the express condition that no issue shall be considered to have
20 been finally determined or adjudicated by virtue of Commission acceptance of the
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23 ⁵⁴⁰ See P-94-1 (9), p. 3.

24 ⁵⁴¹ See Tr. 3257 (RGV).

25 ⁵⁴² *Re Amerada Hess Pipeline Corp.*, 117 F.3d 596 (1997).

26 ⁵⁴³ Tr. 3248, 3254 (RGV).

1 agreement.”⁵⁴⁴ Accordingly, the FERC Form 6 data need not be adjusted to reflect
2 adjustments due to PBOP.

3 For these reasons, despite these five issues we find that the Carriers’
4 sponsored operating expenses are reliable for determining appropriate operating
5 expenses for 1977-1996.

6 2. Return on Rate Base

7 Return on rate base is the product of rate of return (r) and rate base (V-D).
8 We establish return on rate base using our findings from Part IV. Exhibit 31 shows the
9 appropriate annual return using these inputs.

10 3. Tax Obligations

11 To determine income tax obligations, we follow the approach of the parties
12 and assume that the Carriers pay maximum statutory federal and state tax rates.⁵⁴⁵
13 Exhibit 32 shows our finding of the appropriate annual income tax allowance.

14 Having made all the necessary findings for the required inputs to calculate
15 the annual revenue requirements for the TAPS using a DOC methodology consistently
16 from the beginning of pipeline operations. We calculate the annual revenue
17 requirement for 1977-1996 at Exhibit 33.⁵⁴⁶

18
19 ⁵⁴⁴*Re Exxon Valdez Litigation and Settlement Costs* 1998 WL 1035074 *2
20 (Alaska P.U.C. Nov. 17, 1998).

21 ⁵⁴⁵This was the approach adopted by all parties. See, e.g., T-7 (RGV) 13; 189A-
22 BEW-T Workpaper BEW_R_RGV6RE.xls, Schedule Income Tax Expense; 225-JFB-T,
23 Workpaper 1.

24 ⁵⁴⁶We make no finding about the appropriate amount that should have been
25 collected in rates for DR&R. However, we find that the Carriers have collected the
26 DR&R amounts specified in the Settlement. *Initial Post-hearing Brief of the Indicated
TAPS Carriers* at 28. So that we can make a valid comparison between the appropriate
annual cost of service under a DOC methodology and the TSM, we do not include any
DR&R amount in the DOC revenue requirement and remove TSM’s DR&R allowance
from the TSM revenue requirement.

1 B. Comparing From the Beginning of Pipeline Operation, the Annual Past
2 Revenue Requirements of a DOC Methodology With the Annual Past Revenue
3 Requirements of TSM, Demonstrates That the Year-end 1996 Rate Base of \$669
4 Million Is Reasonable

5 We now compare the past annual DOC revenue requirements shown at
6 Exhibit 33 with the past annual TSM revenue requirements. Exhibit 7, Schedule 2
7 reveals that TSM has, on a cumulative basis,⁵⁴⁷ provided the Carriers with an
8 opportunity to recover \$9.9 billion more than their costs as determined by the DOC
9 revenue requirements.⁵⁴⁸ In 1997 dollars, the net present value⁵⁴⁹ of the cumulative
10 stream of revenue requirement differences is \$13.5 billion, far in excess of the \$669
11 million year-end 1996 DOC rate base.

12 Because the revenue requirements determined under TSM have been
13 higher than costs as determined under a DOC methodology applied consistently from
14 the beginning of pipeline operations, we find that the Carriers have had ample
15 opportunity to recover costs and no taking of Carrier property occurs if we adopt a \$669

16
17 ⁵⁴⁷Our finding regarding the appropriateness of TSM depreciation and the year-
18 end 1996 rate base is properly tested with reference to the Carriers' *cumulative*
19 historical opportunity to recover their full costs of service. In *Re Amerada Hess Pipeline*
20 *Corporation*, Order P-97-4(79), April 10, 2000, we directed the Carriers to show that
21 1997-2000 rates reflect costs. We found that evidence that rates are just and
22 reasonable over the life of the line is not sufficient to prove that the rates for specific
23 years are just and reasonable. *Id.*, at 11. The Carriers' "life of the line" argument
24 requires, among other things, a projection of costs of service into the future. Moreover,
25 it fails to address whether 1997-2000 costs are reflected in 1997-2000 filed rates. We
26 evaluate *historical* costs; we do so to determine whether 1997-2000 rates reflect the
 costs of providing service for the years in question.

⁵⁴⁸Exhibit 7, Schedule 2, Line 1.

⁵⁴⁹Exhibit 7, Schedule 2, Line 2. The net present value calculation uses interest
 rates equal to the Commission's overall weighted rate of return in each year. See
 Exhibit 7, Schedule 1, Line 6. We note that the present value comparative revenue
 requirement analysis indexes 1997 dollars, because those are the dollars with which the
 remaining rate base is measured.

1 million year-end 1996 rate base.⁵⁵⁰ Therefore, we find that the \$669 million year-end
2 1996 rate base calculated consistent with *Cook Inlet* and confirmed using the
3 comparative revenue requirement analysis suggested by *Kenai* is just and reasonable.
4 In the following part we calculate 1997-2000 rates using the \$669 million rate base.

5
6 VI. WE COMPUTE 1997-2000 INTRASTATE TAPS RATES USING THE \$669
7 MILLION YEAR-END 1996 RATE BASE

8 We establish a TAPS revenue requirement for each year 1997-2000,
9 using the formula $RR = [r (V-D)] + [OE + d + t]$. From the revenue requirement, we
10 calculate a rate to each delivery point on TAPS.

11
12 ⁵⁵⁰The logic of *Kenai* suggests an alternative approach for determining rate base
13 in the middle of a pipeline's life. *Kenai* discusses the possibility of a pipeline company
14 advocating an upwards adjustment to rate base if the cumulative opportunity for
15 investment recovery were insufficient. A symmetric reading suggests that a downward
16 adjustment to rate base might be advocated if the cumulative opportunity for investment
17 recovery was excessive. Extending *Kenai*'s logic thus suggests that rate base might be
18 established by determining the cumulative net opportunity for investment recovery that
19 the Carriers have enjoyed. The Carriers appear to endorse such a view. See *Initial*
20 *Post-hearing Brief of the Indicated TAPS Carriers* at 14; T-10 (WBT) 84.

21 As Exhibit 7 shows, opportunities for investment recovery were much greater
22 than remaining investment as of year-end 1996. This holds true *even if a straight-line*
23 *depreciation schedule were adopted*. Exhibit 4 shows a comparative revenue
24 requirement analysis using the Carriers' FERC Form 6 straight-line depreciation
25 charges and the other Commission-adjudicated inputs of Part IV and Part V Section A.
26 It demonstrates that the Carriers' opportunity to recover their investment as of year-end
1996 was \$7.4 billion greater than the costs of providing service even under this
alternative set of assumptions. In 1997 dollars, the net present value (calculated as per
Exhibit 7) of these over-collections is \$12.6 billion. The result shows that the Carriers'
exhibit ABJ-19 is incorrect, largely because the capital structure and rate of return
inputs chosen for the DOC methodology are inappropriate.

Exhibits 7 and 4 show that, under the logic of *Kenai*, rate base could be set to
reflect only the new investment that Carriers have made during 1997-2000. We decline
to apply this rationale to set rate base. None of the protestants sponsored such an
analysis. Moreover, the *Cook Inlet* approach has been upheld by the Alaska Supreme
Court. *Cook Inlet Pipe Line Co. v. Alaska Pub. Util. Comm'n*, 836 P.2d 343 (Alaska,
1992)

1 To establish the revenue requirements for 1997-2000, we determine each
2 individual element. We adopt historical test years for 1997-1999 and a mixed
3 historical/projected test year for 2000 consistent with the information that was available
4 to the parties at the hearing. Below, we establish in Section A the appropriate rate of
5 return (r), and in Section B the rate base (V-D). Because we must set rates for four
6 years, in the discussion of rate base we also determine yearly depreciation charges (d).
7 In Section C, we then determine the appropriate return on rate base, and associated
8 income tax allowance. In Section D we establish appropriate operating expenses. In
9 Section E we calculate the resulting total annual revenue requirement. Having
10 determined the total revenue requirement, we finally determine rates.

11 A. Rate of Return

12 We establish an overall rate of return for each of the years from 1997 to
13 2000. The overall rate of return is determined by the embedded cost of debt and the
14 market return on equity. To determine these elements, we establish: (1) capital
15 structure, (2) cost of debt, (3) return on equity and (4) rate of return adjustment
16 necessary to compensate for any special risks associated with TAPS.

17 1. The Appropriate Capital Structure for 1997-2000

18 In Part IV Section B.1, *supra*, we discussed appropriate capital structure
19 for the TAPS Carriers. Our general practice is to use the actual capital structure of a
20 regulated entity unless there is a good reason to believe that the actual capital structure
21 does not properly reflect the risks of the enterprise. For the reasons discussed in Part
22 IV Section B.1, we found that the actual capital structure of the TAPS Carriers in the
23 years 1977-1996 should not be used.⁵⁵¹ Instead, we used a hypothetical capital

24
25 ⁵⁵¹We previously determined that all Carriers face the same risks in owning
26 TAPS. Based on the principle that capital structure should thus be the same for each
Carrier, we do not use the actual capital structure of each TAPS Carrier.

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1 structure based upon the capital structure that we determined could be supported by a
2 stand-alone TAPS. A hypothetical capital structure is also appropriate for 1997-2000 for
3 the same reasons that it was appropriate for 1977-1996.

4 Normally, a single capital structure is proposed to support a filed rate. The
5 TAPS Carriers, however, rely on one set of capital structures to generate an overall rate
6 of return recommendation. Once this overall rate of return is established, the Carriers
7 then rely on the Miller-Modigliani theorem, and sponsor a different capital structure to
8 allocate that rate of return into debt and equity components.⁵⁵²

9 To derive an overall rate of return recommendation, the Carriers' consider
10 both petroleum and gas pipeline proxy samples.⁵⁵³ The Carriers measure capital
11 structure using the equity stock's market, rather than book value.⁵⁵⁴ They argue that
12 market value yields a more appropriate measure of capital structure because the
13 required return on equity is a market-determined value that depends on market
14 perception of financial risk.⁵⁵⁵ Although the Carriers recognize that the petroleum
15 pipeline companies in their sample issue preferred stock, for purposes of deriving an
16 overall rate of return the Carriers assume that the cost of preferred stock is the same as
17 the cost of debt.⁵⁵⁶ In effect, then, the Carriers consider only debt and common equity
18 in the capitalization of pipelines in their proxy samples.

19 Having calculated an overall rate of return, the Carriers then use the TAPS
20 parent company capital structure and return on debt to "back out" the required return on
21

22 ⁵⁵² See Tr. 2972-76 (WBT) and 87-WBT-T for a detailed explanation.

23 ⁵⁵³ T-3 (WBT) 55.

24 ⁵⁵⁴ T-3 (WBT) A-9.

25 ⁵⁵⁵ *Id.*, T-10 (WBT) Appendix A at 8.

26 ⁵⁵⁶ T-3 (WBT), A-10.

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1 equity.⁵⁵⁷ Exhibit 34 shows the actual capital structures of the parent company of each
2 TAPS Carrier for each of the years 1997 through 1999.⁵⁵⁸ The Carriers' arguments for
3 using the parent company capital structures for 1997-2000 are the same as those
4 offered for 1968-1996. Their proposed debt/equity structures range from 60.68/39.42 to
5 10.3/89.7.⁵⁵⁹

6 For 1997-2000, Williams advocates a capital structure based on the
7 average of the petroleum pipelines in its proxy sample. Williams explained that lower-
8 48 petroleum pipeline operations are substantially similar to TAPS; therefore, the
9 petroleum pipeline proxy group provided a good reference for the appropriate
10 capitalization of a stand-alone TAPS. Williams argued that the book value of proxy
11 group debt and equity, rather than market value, should be used to measure capital
12 structure. Williams' recommended capital structure is the average capital structure of
13 the pipelines in its sample.⁵⁶⁰ It reflects the average contribution of preferred stock,⁵⁶¹
14 as well as common stock and debt. For 1997-2000, Williams recommends the following
15 debt percentages: 53.10 percent, 51.28 percent, 52.55 percent, and 51.28 percent.

16 Like the Carriers, Tesoro recommends a capital structure that is based
17 upon analysis of both petroleum and gas pipeline proxy samples. Tesoro relies upon
18 the subsidiary company data from the gas pipeline group, rather than the holding
19
20

21 ⁵⁵⁷T-3 (WBT) 59-60.

22 ⁵⁵⁸Data for 2000 was not available during the hearing.

23 ⁵⁵⁹See Exhibit 34.

24 ⁵⁶⁰See JSG-T (W-2) 28.

25 ⁵⁶¹Williams' recommended contribution of preferred stock to the overall capital
26 structure for 1997-2000 is 0.3 percent, 0.43 percent, .34 percent, and .35 percent,
respectively. JSG-T (W-2) 29.

1 company gas pipeline data (upon which the Carriers rely).⁵⁶² Tesoro's expert witness
2 urges that the holding company data is not representative for how pipeline companies
3 should be financed. They are over-leveraged as a result of acquisitions and mergers in
4 recent years accomplished largely through the use of debt capital.⁵⁶³ Tesoro urges, as
5 does Williams, that the book value of its proxy sample pipelines should be used as a
6 guide to capital structure, rather than market value.⁵⁶⁴ After calculating the average
7 capital structure of the pipelines in its samples, Tesoro makes a minor adjustment to
8 account for bond ratings in arriving at its recommendation of 49.5 percent debt for all
9 four years in question.⁵⁶⁵ Tesoro does not include preferred stock within its derivation of
10 an appropriate hypothetical capital structure.

11 For the same reasons as articulated in Part IV Section B.1, *supra*, we
12 reject the use of Carrier parent company capital structures. It largely reflects the risk
13 and business decisions of integrated petroleum companies, rather than pipeline
14 companies.⁵⁶⁶ We, therefore, do not use the capital structure of each parent company
15 for its subsidiary TAPS Carrier. Using the weighted average capital structure of the
16 TAPS parent companies⁵⁶⁷ makes no more sense than using the individual parent

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18 ⁵⁶²FJH-T (E-2) 16.

19 ⁵⁶³*Id.*

20 ⁵⁶⁴FJH-T (E-2) 19.

21 ⁵⁶⁵FJH-T (E-2) 21-22; Tr. 5037-38 (FJH).

22 ⁵⁶⁶The Carriers' expert witness acknowledged that the TAPS parent company
23 capital structure was not particularly appropriate for a stand-alone TAPS. See T-3
24 (WBT) 58. Although he suggested that parent company capital structures have a
25 greater percentage of debt than a stand-alone company would support -- a position we
26 rejected in Part IV.B.1 -- he maintained that his approach was consistent with a
traditional regulatory practice. See Tr. 2791, 2797 (WBT).

⁵⁶⁷That weighted average for the years 1997, 1998, and 1999 is shown in Exhibit
10.

1 capital structures. In consequence, we find no compelling reason to use the Carriers'
2 circuitous approach of first finding the appropriate overall rate of return and then
3 "backing out" the return on equity through the use of some other hypothetical capital
4 structure. The traditional approach of constructing the overall rate of return from the
5 ground up has stood the test of time⁵⁶⁸ and does not rely upon the Miller-Modigliani
6 theorem. We adopt it here.

7 We determine the appropriate capital structure for a stand-alone TAPS
8 with reference to the capitalization of a pipeline sample. The record presents three
9 issues. First, whether appropriate capitalization should be determined in reference to
10 both oil and gas pipelines, or to oil pipelines only. Second, whether to adopt book or
11 market values in determining capital structure. Third, whether to include preferred stock
12 in the capitalization of a hypothetical stand-alone TAPS.

13 We rely on the gas and oil pipeline sample data, rather than oil pipeline
14 data alone. As the Carriers' expert witness notes, the number of publicly traded
15 petroleum pipeline companies is quite small.⁵⁶⁹ Gas pipelines share many of the same
16 business risks as oil pipelines,⁵⁷⁰ and can therefore provide a useful reference point.⁵⁷¹
17 We find that it is reasonable to expect that investors would look to other publicly traded
18 companies, engaged in similar affairs, for guidance.

19 Second, we use book value to determine benchmark capitalization of the
20 proxy pipeline companies. We acknowledge that academic theory provides some

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22 ⁵⁶⁸On cross examination, the Carriers' expert witness could not provide any clear
examples where his suggested approach had been applied. See Tr. 2563-64 (WBT).

23 ⁵⁶⁹T-3 (WBT) A-10.

24 ⁵⁷⁰We acknowledge that the business risks of the two types of pipelines are
distinct, but there appear also to be many similarities. See Tr. 4384 (JSG).

25 ⁵⁷¹T-3 (WBT) A-10.
26

1 support for the Carriers' approach of using market values,⁵⁷² however, it is standard
2 regulatory practice to rely on book value.⁵⁷³ Book value measures the capital that has
3 been actually provided to support utility operations.⁵⁷⁴ This is the necessary information
4 for regulators.⁵⁷⁵ Moreover, book values are relied upon by analysts, bond rating
5 agencies, and financial publication firms.⁵⁷⁶ Standards & Poor's target financial ratios
6 for utilities are based on book values.⁵⁷⁷ SEC Form 10-K's also rely on book values.⁵⁷⁸
7 All of these sources are readily available, and thus likely to affect investor-decisions.⁵⁷⁹
8 We find that book values are more likely to be the data upon which investors rely.

9 Finally, we do not ascribe a contribution of preferred stock in our finding
10 regarding a hypothetical capital structure for a stand-alone TAPS. As a practical matter,
11 preferred stock represents an extremely small portion of the average capitalization of
12 the proxy group pipelines.⁵⁸⁰ Therefore, it will have little effect on the overall rate of
13 return. The record provides little rationale for why we should adopt a contribution of
14 preferred stock to the overall hypothetical capitalization of a stand-alone TAPS.
15 Consistency with our hypothetical capitalization for 1968-1996 suggests that we avoid
16 imputing a contribution of preferred stock.

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19 ⁵⁷²See T-10 (WBT) Appendix A at 8.

20 ⁵⁷³JSG-T (W-2) 28.

21 ⁵⁷⁴*Id.*

22 ⁵⁷⁵Tr. 4382-83 (JSG).

23 ⁵⁷⁶FJH-T (E-2) 19.

24 ⁵⁷⁷FJH-T (E-2) 60.

25 ⁵⁷⁸See, e.g., FJH-T (E-2) 60.

26 ⁵⁷⁹FJH-T (E-2) 61.

⁵⁸⁰FJH-3 at 1; JSG-2 Schedule 9 at 1. See n.561, *supra*.

1 Based on these findings we adopt Tesoro's recommended capital
2 structure of 49.5 percent debt. Further, we adopt a single capital structure for the four
3 years in question because nothing in the record suggests that it varied significantly
4 enough to affect the cost of debt.⁵⁸¹ This capitalization is very close to that
5 recommended by Williams. Moreover, it is consistent with our approach to back-casting
6 the hypothetical TAPS capital structure for 1977-1996.

7 2. Appropriate Cost of Debt

8 We generally use a regulated entity's actual embedded cost of debt to
9 calculate revenue requirement. In this case, no party suggested using the Carriers' cost
10 of debt. What little debt is carried by the TAPS Carriers is guaranteed by their parent
11 companies. Thus, we do not use that cost of debt.

12 Williams advocated using the Carriers' parent companies' embedded cost
13 of debt.⁵⁸² The Carriers also advocated using the parent company embedded cost of
14 debt in constructing a revenue requirement, but they do so only after determining an
15 overall rate of return of proxy companies, and then adding a TAPS specific risk
16 premium.⁵⁸³ In arriving at the overall return required by the sample pipelines, the
17 Carriers used a current market cost of debt, BBB-rated electric utility bonds, rather than
18 the embedded cost of debt of the sample pipelines.⁵⁸⁴

19 The record provides no clear economic rationale for adopting the parent
20 company cost of debt when the parent company's activities fail to approximate those of
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22

23 ⁵⁸¹Tr. 5043 (FJH).

24 ⁵⁸²JSG-T (W-2) 31.

25 ⁵⁸³T-3 (WBT) A-13 - A-14.

26 ⁵⁸⁴See WBT-12.

1 a pipeline subsidiary. Moreover, the parent company cost of debt is not appropriate
2 given that we do not adopt the parent company capital structure.

3 Instead of a current cost of debt, we look to the actual embedded proxy
4 company cost of debt. The hypothetical cost of debt should not be the current market
5 cost of debt because we strive to set rates that reimburse the Carriers' costs. The book
6 rate, rather than the market rate, reflects these costs.

7 In the context of its recommended 49.5 percent debt capital structure,
8 Tesoro advocated hypothetical debt costs of 8.00 percent for 1997, 7.75 percent for
9 1998, 7.50 percent for 1999, and 7.40 percent for 2000. Tesoro's rate of return witness
10 bases his recommendations on the weighted average cost of debt of three separate
11 proxy groups. On a composite basis, the TAPS Carriers' parent companies have costs
12 of debt of 7.75 percent, 7.44 percent, 6.78 percent, and 6.99 percent for 1997-2000,
13 respectively; the parent companies have lower debt/equity ratios than the capital
14 structure we have adopted. The proxy group of oil pipeline companies have an
15 embedded cost of debt of 8.81 percent, 8.18 percent, 7.24 percent, 7.17 percent for
16 1997-2000, respectively. The operating subsidiaries of proxy gas pipeline holding
17 companies have an average embedded cost of debt of 8.14 percent, 7.83 percent, 7.72
18 percent, and 7.59 percent for 1997-2000, respectively; their debt equity ratios are
19 greater than the capital structure we have adopted.

20 We use the arithmetic average of the average embedded cost of debt of
21 Tesoro's proxy oil pipeline companies and the average embedded cost of debt of
22 Tesoro's proxy gas pipeline companies for each of the years 1997-2000. We cannot
23 determine the actual numbers with greater precision. Using an average takes into
24 account the range of different rates.

1997	8.475%
1998	8.005%
1999	7.48%
2000	7.38%
Average	7.805%

We adopt the average of the four yearly averages as the hypothetical cost of debt used to calculate revenue requirements for 1997-2000. Because the actual embedded pipeline cost of debt changes slowly, if at all, from year to year, we adopt the same hypothetical cost of debt for all four years to more closely track our preferred cost of debt.⁵⁸⁵

3. Appropriate Return on Equity

The appropriate return on equity should reflect the compensation that investors require based on their perceptions of prospective project risks.⁵⁸⁶ All parties agree that current period TAPS risks are essentially comparable to those of the average pipeline.⁵⁸⁷ Thus, the parties' methods are designed to determine equity investor requirements given average pipeline risk. After mechanical application of their favored methods, the parties' expert witnesses apply their judgment to select between estimates. Some then add a risk premium to accommodate special TAPS risks.

The Carriers base their return on equity recommendation on DCF analyses of publicly traded petroleum and gas pipeline companies.⁵⁸⁸ They present

⁵⁸⁵We note a substantial drop in our findings regarding the back-cast cost of debt in 1996 (9.24 percent) to 1997 (7.84 percent). We assume that a stand-alone TAPS would have taken advantage of the lower interest rates of recent years and refinanced its long-term debt.

⁵⁸⁶FJH-T (E-2) 7.

⁵⁸⁷See n.404, *supra*.

⁵⁸⁸The Carriers select their recommended return on equity from the petroleum pipeline estimates, but use the gas pipeline sample as a reference. T-6 (WBT) 38.

1 both simple⁵⁸⁹ and two-stage⁵⁹⁰ DCF analyses calculated for two periods, 1997-98 and
2 1999-2000. On a composite basis the Carriers add equity risk premiums of 4.53
3 percent, 4.63 percent, 4.65 percent, and 4.65 percent for 1997-2000,⁵⁹¹ respectively, to
4 reflect extraordinary TAPS-specific risks.

5 Williams bases its return on equity recommendation on DCF analyses of
6 publicly traded petroleum pipeline companies and of the TAPS parent companies. It
7 presents both simple⁵⁹² and two-stage⁵⁹³ DCF analyses for 1997-2000. In addition,
8 Williams projects forward the return on equity established by the APUC in *Kenai*, in the
9 same manner in which it had back-cast those results.⁵⁹⁴ Williams adds a construction-
10 period risk premium of 50 basis points to its proxy-based recommendations. Finally, as
11
12

13 ⁵⁸⁹The Carriers project dividend growth rates using the I/B/E/S 5-year earnings
14 forecasts. WBT-37 at 2.

15 ⁵⁹⁰The Carriers' two-stage DCF analysis estimates future dividend growth as a
16 weighted average of company growth forecasts (2/3) and gross domestic product (GDP)
17 growth forecasts. For 1997-1998, future GDP growth is estimated using the ten-year
18 consensus forecast of nominal GDP growth (2000-2009) provided by Blue Chip
19 Economic Indicators for long-term GDP growth forecasts. T-3 (WBT) A-6. For 1999-
20 2000, future GDP growth is taken as the average of estimates made by the Energy
21 Information Administration and Social Security Administration (WBT-37 at 3) -- as is
22 consistent with FERC's. See, e.g., *Trunkline Gas Co.*, 90 F.E.R.C. ¶ 61,017, 61,116-17
23 (2000); *Williston Basin Interstate Pipeline Co.*, 91 F.E.R.C. ¶ 63,005, 65,085 (2000).

24 ⁵⁹¹The equity premiums result from applying a constant 3.5 percent premium to
25 the entire cost of capital, but placing the entire weight of this premium to only the return
26 on equity. The equity premiums are not reported by the Carriers, but were derived from
the composite Carrier capital structure, cost of debt, and overall rate of return data as
contained in 143-RGV-C, RGV-14 WP 3, TAPS-RGV WP3.xls; see Input II. 6, 5, and 4,
respectively.

⁵⁹²Williams projects dividend growth rates, as do the Carriers, using I/B/E/S
estimates. JSG-T (W-2) 15.

⁵⁹³Williams estimates future dividend growth as a weighted average of I/B/E/S
growth rate projections (weighted 2/3) and historical retention growth rates (weighted
1/3). JSG-T (W-2) 16, 19.

⁵⁹⁴JSG-T (W-2) 22.

1 an adjustment to reflect the costs of issuing common stock, Williams multiplies its
2 preliminary recommendation by 1.05.

3 Tesoro bases its return on equity recommendation on multiple methods
4 applied to publicly traded petroleum and gas pipeline companies, as well as the TAPS
5 parent companies.⁵⁹⁵ It presents simple⁵⁹⁶ and two-stage⁵⁹⁷ DCF analyses, traditional
6 and empirical capital asset pricing models (CAPM and ECAPM),⁵⁹⁸ a comparable
7 earnings model (CEM), and a risk premium model (RPM). Tesoro's expert witness
8 applied his judgment to choose among the various estimates. The result is generally
9 within 10 basis points of the mean of results across all methods and both proxy groups.
10 Tesoro makes separate recommendations for each of the four years at issue and
11 asserts that no risk premium need be awarded.

12 The returns on equity recommended by each party, exclusive of any
13 special TAPS risk premium are:

17 ⁵⁹⁵Tesoro's expert witness relies principally upon the two proxy groups of five oil
18 and four gas pipeline companies. See FJH-T (E-2) 52. He does not consider the TAPS
19 Carriers' parent companies to be indicative of how a pipeline company should be
20 financed. FJH-T (E-2) 16.

21 ⁵⁹⁶Tesoro estimates future dividend growth as the average of the I/B/E/S and
22 Value Line projections of growth rates in earnings per share for each company in each
23 group. FJH-T (E-2) 31.

24 ⁵⁹⁷Tesoro provides two, two-stage DCF analyses. Like the Carriers and Williams,
25 it performs a FERC-style two-stage DCF, with an estimate of future dividend growth as
26 the weighted average of I/B/E/S growth rate projections (weighted 2/3) and GDP growth
forecasts (weighted 1/3). Future GDP growth is taken as the average of estimates
made by the Energy Information Administration and Social Security Administration.
FJH-T (E-2) 34. Tesoro also presents a two-stage compound growth analysis. Its two-
stage recommendation is the average of both two-stage results.

⁵⁹⁸Tesoro's CAPM recommendation is the average of the results produced by its
traditional CAPM and ECAPM analyses. FJH-T (E-2) 47.

	Carriers	Williams	Tesoro
1997	13.30 percent	14.17 percent	12.50 percent
1998	13.30 percent	12.82 percent	12.25 percent
1999	16.00 percent	14.75 percent	13.25 percent
2000	16.00 percent	14.75 percent	14.00 percent

The parties largely failed to successfully rebut each other's various approaches to determining return on equity.⁵⁹⁹ For the most part, the record fails to provide a theoretical or empirical basis for deciding whether any particular method is more appropriate than another.⁶⁰⁰ The record also fails to suggest that any of the expert witnesses have applied their chosen methods inappropriately, or have chosen inappropriate data or parameters.

We find Tesoro's expert witness to be the most credible. We base our rate of return findings primarily upon Tesoro's witnesses' recommendation. Tesoro sponsors multiple methods because it believes investors rely on the widest possible

⁵⁹⁹The Carriers urge that Tesoro's expert witness used non-DCF approaches to "water down" the higher returns generated by the DCF method. The Carriers also suggest that we adopt the DCF approach because this is the method generally preferred by the FERC for oil pipelines. See T-10 (WBT) 15. However, no empirical or theoretical evidence was offered in this case to support the contention that the DCF method is a superior guide to investor perceptions and expectations. Thus, Carriers' charges that Tesoro "watered down" its results carry no more weight than the contrary position that the Carriers artificially boosted their own results. Further, no reasons were provided for why FERC practice is either particularly accurate or appropriate for use by this commission. Indeed, the record only suggests theoretical reasons for *not* adopting the FERC approach. See n.600.

⁶⁰⁰Tesoro's expert witness urges that the FERC's two-stage DCF methodology is inappropriate because it is inconsistent with the theory underlying the DCF approach. FJH-T (E-2) 33. Nevertheless he presents and relies upon the FERC's approach to the two-stage DCF because he lacks any empirical evidence to suggest that investors do not rely upon it. Tr. 5028 (FJH).

1 information available.⁶⁰¹ We agree with Tesoro that investors are aware of all the
2 various traditional cost of common equity models discussed in financial literature.
3 Absent good reason for believing that investors weight the results of one method more
4 heavily than another in their assessment of an appropriate rate of return, it is
5 reasonable to hold that investors ascribe weight to them all. We note that the APUC
6 has relied on a variety of methods when those methods were reliable given the specific
7 facts at hand.⁶⁰²

8 In addition, we find Tesoro's DCF analysis the most reliable. Tesoro relies
9 on I/B/E/S and Value Line estimates of future dividend growth, rather than just the
10 I/B/E/S data. In the absence of a good rationale for why investors would be more likely
11 to rely on one data source than another, we find Tesoro's agnostic approach preferable.
12 In a similar vein, Tesoro relies equally upon the single and two-stage results, rather than
13 choosing a result based on "expert judgment". Absent good motivation for why an
14 investor would make the same judgments as did the competing expert witnesses,⁶⁰³ we

15 ⁶⁰¹FJH-T (E-2) 14-15.

16 ⁶⁰²The APUC has relied on comparable earnings and risk premium methods as
17 benchmarks in their determination of return on equity, although they gave primary
18 weight in that case to the DCF method. *Re Alascom, Inc.*, 7 APUC 665 (1986); *Re*
19 *Enstar Natural Gas Co.*, 7 APUC 375 (1986). In the current proceeding the expert
20 witnesses' methods were largely un rebutted.

21 ⁶⁰³The Carriers' witness, "after taking into consideration" the results from the
22 natural gas pipeline sample, relies on the FERC DCF result for his 1999-2000
23 recommendation, while taking the average of the two approaches for his 1997-1998
24 recommendation. T-6 (WBT) 38. No theoretical reason is given for why such
25 consideration should emulate the process that investors go through.

26 Williams' witness essentially selects the single stage petroleum pipeline DCF
results in 1997 and 1999, eschews the DCF results altogether for 1998, and then
adopts an average across his results for 2000. Tr. 4381 (JSG). He provides no reason
for his primary reliance upon the single stage DCF. Tr. 4380 (JSG). While he explains
that his choices for 1998 and 2000 based on "smoothing variability" (Tr. 4380-81 (JSG)),
there are numerous ways to smooth such variability. Indeed, the substantial variability
to which he points is arguably a product of his substantial reliance on the single-stage
results.

1 find such equal weighting reasonable. Tesoro's DCF recommendation is also favored
2 because, unlike Williams' DCF recommendation, it is integrally based on the same
3 proxy companies as were used to determine appropriate capital structure and cost of
4 debt. Finally, Tesoro sponsors separate return on equity figures for each of the years in
5 question, rather than using a single figure for two years, as do the Carriers.

6 Although we primarily rely upon Tesoro's recommendation, we are
7 concerned, however, about Tesoro's CAPM analysis. Tesoro averaged the results it
8 obtained from CAPM and ECAPM while at the same time providing empirical
9 testimony⁶⁰⁴ that the ECAPM results are more accurate than traditional CAPM results.
10 The reasonable investor would be aware of these empirical results. Therefore, we
11 adjust Tesoro's recommendation to reflect only the ECAPM result.

12 We adopt returns on equity for each of the years 1997-2000, based on
13 Tesoro's DCF, ECAPM, CEM and RPM results for each of the companies (both
14 petroleum and gas pipelines) in its sample groups. We find that those returns, which do
15 not include any risk premium, are:

17	1997	12.71 percent
18	1998	12.26 percent
19	1999	13.61 percent
20	2000	14.00 percent

21 Williams contended that we should add flotation costs to ensure that the
22 return is sufficient to attract new common equity capital on reasonable terms without
23 diluting the value of existing investment. The Carriers, however, are wholly owned
24 subsidiaries that do not offer stock to the public; no dilution of shareholder value could
25 therefore occur. Further, the APUC has consistently rejected the addition of flotation

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⁶⁰⁴FJH-T (E-2) 43.

costs when the regulated entity did not contemplate issuance of stock.⁶⁰⁵ The parties have not presented any sound reason to deviate from that precedent in this case. Therefore, we do not award a flotation cost adjustment.

4. Rate of Return Adjustment to Compensate for Any Special Risks Associated With TAPS Between 1997 and 2000

The parties agree that during the period 1997-2000 TAPS was no more risky than the average petroleum pipeline.⁶⁰⁶ Therefore, we add no risk premium to our adopted returns on equity to account for present risk.

In Part IV Section B.4., *supra*, however, we determined that a risk premium of 75 basis points should be added to return on equity through the middle of 2002, in consideration of early period risk. The returns on equity we use to calculate rates for 1997-2000 consist of the adopted returns on equity and this early period risk premium. We find that those returns are:

1997	13.46 percent
1998	13.01 percent
1999	14.36 percent
2000	14.75 percent

5. Overall Rate of Return

The overall rate of return is calculated as the weighted average of the cost of debt and equity. Given the foregoing findings on capital structure, cost of debt, and return on equity, we find that the resulting returns on rate base are:

1997	10.68%
1998	10.45%
1999	11.13%
2000	11.33%

⁶⁰⁵*Re Enstar Natural Gas Co.*, 7 APUC 375, 400 (1986); *Re Kenai Pipe Line Co.*, 12 APUC 425, 1992 WL 696192 (Alaska P.U.C., 1992).

⁶⁰⁶T-3 (WBT) 39; T-10 (WBT) 9-10; FJH-T (E-2) 6; JSG (W-2) 39:10-11.

1 B. Rate Base

2 In Part IV Section E, we established that the year-end rate base for 1996
3 was \$669 million, as shown at Exhibit 29, line 18. The rate base for 1997, 1998, 1999,
4 and 2000 is affected by subsequent additions to gross Carrier property, changes in
5 working capital, and additions due to AFUDC. Rate base is also a function of
6 subtractions that come from yearly depreciation charges, property retirements, and the
7 amortization of AFUDC. Finally, we adjust rate base to reflect ADIT, the “cost free”
8 capital provided by shippers that results from differences between depreciation
9 schedules used for tax and rate making purposes.

10 1. Carrier Property Balances and Working Capital

11 Although the TAPS pipeline was constructed from 1968 to 1977, property
12 additions are still being made. We must determine capital additions and retirements for
13 1997-2000. We generally adopt the Carrier-sponsored data, rather than Tesoro’s data,
14 for the same reasons as articulated in Part IV Section A.1.⁶⁰⁷ Similarly, we adopt the
15 Carriers’ sponsored Working Capital allowances, rather than Tesoro’s, for the same
16 reasons as articulated in Part IV Section A.3. These amounts are shown, below.

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24 ⁶⁰⁷For the same reasons articulated at n.229, we use the FERC Form 6 data on
25 retirements filed with the Commission, rather than the Carrier-sponsored retirements
26 data. The differences are not material.

Line No.	Account	1997	1998	1999	2000
1	Land - New Construction Exp.	\$0	\$0	\$0	\$0
2	Grand Total - New Construction Exp.	\$61	\$30	\$95	\$45
3	Grand Total - Acquired Property	\$0	\$0	\$0	\$0
4	Grand Total - Credits for Retirements	(\$3)	(\$6)	(\$47)	(\$1)
5	Grand Total - Other Adjustments	(\$0)	(\$0)	(\$0)	\$0
6	Land - EOY Balance	\$19	\$19	\$19	\$19
7	CWIP – EOY Balance	\$30	\$39	\$43	\$30
8	Grand Total - EOY Balance	\$10,214	\$10,238	\$10,286	\$10,330
9	Capitalized Interest - EOY Balance	\$1,205	\$1,205	\$1,205	\$1,205
10	Working Capital	\$44	\$43	\$47	\$24

2. AFUDC

For the reasons given and in the manner articulated in Part IV Section B.5, we permit AFUDC for capital expenditures made during 1997-2000. We adopt the AFUDC additions depicted at Exhibit 35.

3. Appropriate Depreciation

We must determine the appropriate depreciation charges to include in the 1997-2000 revenue requirements. To determine those amounts we must decide the remaining economic life of TAPS, as well as the depreciation profile appropriate for ratemaking purposes.

a) Life of the Line

TSM assumes a 34-1/2-year life of TAPS, ending in 2011. TSM's stipulated life of the line is the same as that contained in an earlier stipulation, signed by

1 all parties, as a part of Phase II of the original litigation.⁶⁰⁸ Neither the APUC, the
2 FERC, nor this Commission have found that 2011 is the appropriate end date for TAPS
3 operations.

4 In this proceeding, Williams contends that TAPS will operate beyond
5 2011. This contention is not seriously challenged. Williams prefiled confidential
6 testimony and exhibits, and submitted confidential evidence at the hearing to support its
7 contention that TSM will operate beyond 2011.⁶⁰⁹

8 Further, public information supports a substantial extension of the life of
9 TAPS for ratemaking purposes. We recently accepted a settlement of Alpine Pipeline
10 rates.⁶¹⁰ The Alpine Pipeline connects to TAPS through the Kuparuk Pipeline. The
11 parties to the settlement of Alpine Pipeline rates⁶¹¹ agreed to an economic life for the
12 Alpine Pipeline extending through 2026. Alpine Pipeline has no reason to operate if
13 TAPS is not in operation. Accordingly, the parties to the Alpine Pipeline Settlement
14 represented that TAPS will operate at least through the year 2026. In accepting the
15 settlement, we accepted that projection.

16 Based on the Alpine settlement and the confidential testimony and exhibits
17 in this docket, we find that the appropriate life of TAPS for ratemaking purposes extends
18 through the year 2026, fifteen years beyond the current assumed 2011 end of TAPS
19 life. Accordingly, for ratemaking purposes we find that the remaining economic life of
20 TAPS as of January 1, 1997 extends for 30 years to December 31, 2026.

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22 ⁶⁰⁸*Re Construction of the Trans Alaska Pipeline*, 4 APUC 338, 341 (1982).

23 ⁶⁰⁹14-ABJ-W.

24 ⁶¹⁰*Re Alpine Transp. Co.*, Order P-00-15(11), dated December 5, 2001.

25 ⁶¹¹The parties to the Alpine Settlement are the State and Alpine Transportation
26 Company, which is largely owned by Phillips Petroleum Company, a major producer of
North Slope oil and a TAPS parent company.

b) Depreciation Profile

The depreciation profile determines the rate at which the Carriers may recover their remaining investment. In their benchmark DOC methodology the Carriers use straight-line depreciation but assume a life ending in 2011.⁶¹² Williams⁶¹³ and Tesoro⁶¹⁴ advocate using TSM depreciation. We use TSM depreciation charges to calculate our year-end 1996 rate base. To calculate depreciate depreciation for 1997-2000 we must choose either TSM's accelerated depreciation schedule or a straight-line depreciation schedule.

TSM depreciation assumes a useful life ending in 2011. We do not use TSM depreciation because we have determined that TAPS' useful life extends to 2026. Use of TSM depreciation would unfairly burden shippers who transport oil in the first 15 years of the 30-year remaining life of TAPS. We thus use straight-line depreciation to calculate 1997-2000 rates.⁶¹⁵

We do not have continuing property records or comparable information in the record that allows us to determine depreciation in the usual way, i.e., based on classes of depreciable property with differing useful lives.⁶¹⁶ Instead, we establish depreciation in a way similar to TSM. We assume all depreciable property has a useful

⁶¹²T-7 (RGV) 10.

⁶¹³189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls.

⁶¹⁴225-JFB-T.

⁶¹⁵As the APUC stated, in pipelines with declining throughput, unit of throughput depreciation may be desirable. *Re Kenai Pipe Line Co.*, 12 APUC 425, 437, 1992 WL 696192 (Alaska P.U.C., 1992). Unit of throughput depreciation attempts to apportion an equal amount of capital costs to each barrel transported on the pipeline. We do not have a record upon which to determine an appropriate unit of throughput depreciation schedule. No party has yet argued for unit of throughput depreciation on TAPS.

⁶¹⁶Typically, a carrier provides evidence showing the various classes of depreciable property. In this case the Carriers did not.

1 life equal to the life we have determined for TAPS. We include in the 1997 revenue
2 requirement 1/30th of the sum of the year-end 1996 net depreciable property and the
3 1997 depreciable property additions.⁶¹⁷ We determine depreciation charges for 1998,
4 1999, and 2000 similarly, using composite depreciation factors of 1/29, 1/28, and 1/27,
5 respectively. We find annual amounts for depreciation are:⁶¹⁸

6	1997	\$ 23,732,829
7	1998	\$ 24,350,726
8	1999	\$ 27,370,118
9	2000	\$ 27,674,341.

10 c) Amortization of AFUDC

11 We amortize AFUDC according to the same depreciation factors we adopt
12 above. This approach to AFUDC amortization is different than that adopted for rate
13 base development purposes in Part IV Section C.3, because in that analysis we had
14 historical data to use.⁶¹⁹ It is, nevertheless, consistent in the principle applied: the rate
15 at which AFUDC is amortized should match the rate at which Carrier property is
16 depreciated. We find annual amounts for amortization of AFUDC are:⁶²⁰

17 ⁶¹⁷Williams' uses depreciation factors to calculate yearly depreciation charges
18 and depreciation additions to property in service on an end-of-year basis. 189A-BEW-T
19 Workpaper BEW_R_RGV WP1 DR 22RE.xls, Schedule 2 line 30. The TSM determines
20 yearly depreciation charges in a similar manner. 31-BEW-T, line 14. However, we
21 depreciate additions to depreciable property in service on a beginning-of-year basis to
22 mirror our treatment of AFUDC amortization. See Exhibit 37. We are guided by the
23 principle that AFUDC amortization should proceed at the same rate as depreciation of
24 Carrier property. See Part IV Section C.3, *infra*.

25 ⁶¹⁸See Exhibit 36 for calculations.

26 ⁶¹⁹For 1977-1996, we adopted AFUDC amortization factors that reflect net
depreciation factors. The derivation of net depreciation factors begins with depreciation
charges, and is influenced by retirements from accumulated depreciation. Here we start
with depreciation factors, and derive depreciation charges. Thus, retirements from
accumulated depreciation do not affect AFUDC retirements. As before, depreciation
proceeds at the same rate as AFUDC amortization.

⁶²⁰See Exhibit 37 for calculation.

1997	\$ 3,673,787
1998	\$ 3,788,596
1999	\$ 4,009,653
2000	\$ 4,281,328.

d) Retirements from Accumulated Depreciation

We explain how adopting TSM depreciation charges affect the appropriate calculation of retirements from accumulated depreciation in Part IV Section C.2. We impose the shape of depreciation profile implicit in the appropriate depreciation charges on charges to accumulated depreciation due to retirements. However, for property placed in service after 1996 and retired during 1997-2000, we make adjustments because a straight-line depreciation profile is adopted for 1997-2000. Exhibit 38 shows the adjustments to accumulated depreciation to reflect property retirements.

4. Accumulated Deferred Income Taxes

ADIT is a function of the difference in timing of depreciation for ratemaking and tax purposes. For ratemaking for 1997-2000, we use the depreciation charges shown in Exhibit 36.⁶²¹ For tax depreciation, we follow the approach taken by all parties and assume the most accelerated methods of tax depreciation allowed,⁶²² i.e., that maximum depreciation charges allowed by state and federal tax law are taken.⁶²³ Consistent with a stand-alone income tax calculation, we follow the parties and assume that income is sufficient to be taxed at the highest statutory rate,⁶²⁴ recognizing relevant

⁶²¹ See *infra* Part VI Section B.3.b.

⁶²² See, e.g., T-7 (RGV) 12; 189A-BEW-T Workpaper BEW_R_RGV WP1 DR 22RE.xls, Schedules 6-7; 225-JFB-T, Workpaper 2.

⁶²³ Exhibit 39, Schedules 1 and 2 show the State and Federal tax depreciation, respectively, used to calculate ADIT balances.

⁶²⁴ See, e.g., T-7 (RGV) 11; 189A-BEW-T Workpaper BEW_R_RGV6RE.xls, Schedule Income Tax Expense; 225-JFB-T, Workpaper 1.

1 changes in income tax rates⁶²⁵ and laws.⁶²⁶ Finally, we follow the approach used by the
2 parties and do not reduce outstanding ADIT balance to reflect changes in deferred
3 taxes associated with property retirements.⁶²⁷ We find that ADIT balances for 1997-
4 2000 are:⁶²⁸

5	1997	\$ 98,112,934
6	1998	\$ 108,152,461
7	1999	\$ 117,233,293
8	2000	\$ 127,327,563.

9 5. Appropriate Rate Base for Year End 1997, 1998, and 1999.

10 Having calculated the necessary elements for V -- the sum of prudently
11 incurred capital expenditures, allowance for funds used during construction, and
12 working capital, adjusted for accumulated deferred income tax and retirements -- we
13 now calculate (V-D) of the DOC formula. We add 1997 additions to property and
14 working capital to year-end 1996 rate base calculated at the end of Part V, subtract
15 retirements, and subtract the depreciation amount described in Part VI Section C,
16 *supra*, and the amount of ADIT calculated above in Part VI, Section D, *supra*. We use
17 this year-end 1997 rate base to calculate the 1998 revenue requirement. Rate base for
18 year-end 1998 and year-end 1999, calculated in the same way, are used to determine
19 the rate bases for 1999 and 2000, respectively. The calculation of average year rate

20 ⁶²⁵See, e.g., T-7 (RGV) 12.

21 ⁶²⁶Exhibit 40 shows the calculation of an adjustment to tax depreciation caused
22 by TEFRA. Pub.L. 97-248, Sept. 3, 1982, 96 Stat. 324. As in Part IV Section D, we
23 include the TEFRA adjustment as it better conforms to Federal statute.

24 ⁶²⁷See T-7 (RGV) 12; 189A-BEW-T Workpaper BEW_R_RGV WP1 DR
25 22RE.xls, Schedules 6-7; 225-JFB-T, Workpaper 2. Carriers note that this tends to
26 result in the highest ADIT balance possible, and thus the largest reduction in rate base.

⁶²⁸See Exhibit 41 for calculation.

base for 1997, 1998, 1999 and 2000 is shown in Exhibit 42. We find the resulting rate bases are:

year-end 1997	\$714,306,826
year-end 1998	\$752,575,116
year-end 1999	\$752,555,251
year-end 2000	\$740,267,853

C. Appropriate Return and Income Tax Allowance

1. Appropriate Return on Rate Base

Using the overall rate of return, that we find at Part VI Section A.5, we calculate return on rate base to be included in revenue requirements for 1997, 1998, 1999, and 2000. Return is calculated against 1997, 1998, 1999 and 2000 average-year rate bases. The average-year rate base is determined as the average of the beginning of year and end of year rate base figures.⁶²⁹ We find the resulting returns on rate base are.⁶³⁰

1997	\$ 76,287,969
1998	\$ 78,644,100
1999	\$ 83,759,399
2000	\$ 83,872,343

2. Income Tax Allowance

We calculate the income tax allowance in the standard way based on our calculated return on equity amounts and assuming maximum statutory federal and state

⁶²⁹ See n.523.

⁶³⁰ See Exhibit 43 for calculation.

1 income tax rates.⁶³¹ Doing so, we find the income tax allowances included in the 1997-
2 2000 revenue requirements are.⁶³²

3	1997	\$ 35,032,772
4	1998	\$ 35,691,153
5	1999	\$ 39,361,114
6	2000	\$ 39,895,903

7 D. Appropriate Operating Expenses.

8 As discussed in Part IV, *supra*, there are two sets of operating expense
9 data in the record, TSM (sponsored by Tesoro) and FERC Form 6 (sponsored by the
10 Carriers and Williams). For the same reasons articulated in Part V Section A, we adopt
11 the FERC Form 6 data for the purpose of calculating 1997-2000 rates. The record does
12 not contain complete FERC Form 6 data for 2000. We accept the Carrier-sponsored
13 operating costs for 2000, which are based on a mix of Carrier actual and projected
14 operating expenses. Tesoro also urges that we disallow “those costs associated with
15 the unique ownership structure the TAPS Carriers have put in place”⁶³³ Tesoro
16 asserts that because TAPS’ joint undivided interest ownership allows each Carrier to file
17 separate tariffs, costs are higher than they would be under more conventional
18 ownership. Tesoro argues that such costs are necessarily inefficient, and therefore
19 imprudently incurred.⁶³⁴ Tesoro urges removing roughly \$27 million⁶³⁵ from the General
20 and Administrative overhead account.⁶³⁶

21 ⁶³¹This was the approach adopted by the parties. See, e.g., T-7 (RGV) 13; 189A-
22 BEW-T Workpaper BEW_R_RGV6RE.xls, Schedule Income Tax Expense; 225-JFB-T,
23 Workpaper 1.

24 ⁶³²See Exhibit 44 for calculation.

25 ⁶³³JFB-T (E-3) 33.

26 ⁶³⁴Tr. 5216 (JFB).

⁶³⁵Tr. 5226 (JFB).

⁶³⁶Tr. 5223 (JFB).

1 Tesoro's claims of imprudence are unsupported by the record. Tesoro
2 fails to detail which operating expenses result from "duplicative ownership."
3 Accordingly, we do not reduce the FERC Form 6 data by the amounts that Tesoro
4 suggests.

5 We find that the Carriers reasonable operating expenses for each year
6 are:⁶³⁷

7	1997	\$ 603,775,000
8	1998	\$ 565,598,000
9	1999	\$ 567,658,000
10	2000	\$ 553,280,000

11 E. Other Rate Elements

12 In *Re Amerada Hess Pipeline Corporation*, Order P-97-4(118)/P-97-7(78),
13 we ruled that if 1997-2000 TAPS rates were found to be unjust and unreasonable, then
14 "the Commission will need to hear evidence on additional issues, including the
15 appropriate amount and management of DR&R".⁶³⁸ Based on this record, we find that
16 the Carriers have collected \$1,552,743,000 from 1977-1996 to cover their costs of
17 eventual DR&R.⁶³⁹ To determine the appropriate amounts for DR&R for 1997-2000 and
18 for subsequent years we must consider the issues of the earnings on funds already
19 collected, the cost of ultimate DR&R obligations and whether the DR&R funds should be
20 maintained in a separate account. Because many years remain in the life of TAPS
21 during which we can adjust the amounts to be collected for DR&R, because DR&R

22 ⁶³⁷ 143-RGV-C, Workpaper TAPS-RGV WP3.xls, Schedule 13.

23 ⁶³⁸ *Re Amerada Hess Pipeline Corp.*, Order P-97-4(118)/P-97-7(78) at 11
(February 16, 2001).

24 ⁶³⁹ See Exhibit 7, Schedule 1, line 3; *Initial Post-hearing Brief of the Indicated*
25 *TAPS Carriers* at 28. Although this figure contains DR&R amounts from TSM-6, we
26 adopt those amounts as having been collected for the same reasons that we found
TSM-6 depreciation amounts to be appropriate. See Part IV Section C.1.

1 issues are complex and costly, and because we do not have a sufficient record to rule
2 on appropriate DR&R charges for 1997-2000 we do not award DR&R in this order.⁶⁴⁰

3 In Phase II of this docket we will investigate these issues and determine if
4 any additional funds should be paid by 1997-2000 shippers for DR&R or whether there
5 should be a negative allowance in future rates to refund overcollections. Determining
6 the Carriers' ultimate obligation will be a challenge at this stage of the pipeline's
7 operation. In Phase II of this case we intend to determine the size of the existing fund,
8 the rate at which it will continue to grow and clarify if there will be a process for refunds
9 or additional collections at the end of the pipeline's life.

10 1. Total Revenue Requirement for 1997, 1998, 1999, 2000

11 Having determined all the inputs for the DOC revenue requirement
12 formula for the period 1997-2000, we now calculate the 1997-2000 revenue
13 requirements exclusive of DR&R. We find that the annual revenue requirements are.⁶⁴¹

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17 ⁶⁴⁰The PAS has consistently maintained that the TAPS Carriers have not
18 accounted for earnings on accumulated DR&R collection. P-1 (RAF) 15, 22-24. The
19 Carriers failed to provide DR&R evidence. They did not include a DR&R allowance in
20 their benchmark rates. They also disavowed TSM's DR&R allowance as representing
21 the appropriate amounts that should be collected in rates to cover eventual DR&R
22 costs. We have no record upon which to award DR&R amounts for 1997-2000 rates.

23 In *Re Amerada Hess Pipeline Corporation*, dated February 16, 2001, we tried to
24 draw a distinction between the DR&R amount includable in 1997-2000 rates from the
25 overall amount of the DR&R obligation and the current size of the DR&R internal fund
26 established by the Settlement. We consolidated Docket P 97-7 and Docket P-97-4 with
27 hopes of being able to award, if appropriate, a DR&R allowance. *Re Amerada Hess
Pipeline Corp.*, Order P-97-4(118)/P-97-7(78) at 12 (February 16, 2001). To reasonably
28 determine the includable amount of DR&R obligation in 1997-2000 rates, however, we
29 must determine the appropriate amount of the overall DR&R obligation as well as the
30 size of the current DR&R internal fund. This record does not provide sufficient
31 information to make these findings.

32 ⁶⁴¹See Exhibit 45 for calculation.

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1997	\$742,502,356
1998	\$708,072,574
1999	\$722,158,284
2000	\$709,003,915

F. Just and Reasonable Rates for 1997, 1998, 1999, and 2000

The Carriers' tariffs provide for three different rates for the transportation of oil on the TAPS, reflecting the three different distances of the off-take points along the pipeline from Pump Station #1. These off-take points are at the Golden Valley Electrical Authority (GVEA) interconnection facility (469.06 miles), the Petro Star interconnection facility (796 miles), and the Valdez marine terminal (800.32 miles).⁶⁴²

The parties adopt a rolled-in barrel mile methodology for calculating intrastate rates to these three destinations, given a revenue requirement.⁶⁴³ Most costs are deemed to be "distance related"; these are apportioned according to a destination's barrel-mile share of total (both intrastate and interstate) barrel-mile deliveries. Total non-distance related costs are apportioned on a per-barrel (both intrastate and interstate) basis. This rate design follows APC's decision in *Re Amerada Hess Pipeline Corporation* as modified by the Quality Bank Agreement accepted by the APUC.⁶⁴⁴ The connection costs specific to the GVEA connection facility are apportioned to the GVEA tariff. The parties do not dispute the magnitude of GVEA connection costs, nor of non-distance related costs, nor of deliveries to any given destination.

⁶⁴²T-2 (BWF) 13.

⁶⁴³See RGV-14 Schedule 1; 225-JFB-T, Workpaper 5; BEW-T (W-3) 48.

⁶⁴⁴*Re Amerada Hess*, 1 APUC 606, 611 (1980); 6 APUC 401, 405 (1984).

1 We therefore adopt the Carriers' undisputed approach to rate design.
2 Accordingly, we make the necessary calculations and find that the following rates are
3 just and reasonable:

	GVEA	Petro Star	Valdez
4 1997	\$1.02	\$1.55	\$1.56
5 1998	\$1.03	\$1.62	\$1.63
6 1999	\$1.19	\$1.88	\$ N/A ⁶⁴⁵
7 2000	\$1.25	\$1.96	\$ N/A.

8 On average the Carriers' filed rates for 1997-2000 exceed cost-based
9 rates by 57 percent. See Exhibit 1 Schedule 3. Fifty-seven percent above cost-based
10 rates is well outside the zone of reasonableness. This further confirms our finding that
11 the 1997-2000 filed rates are unjust and unreasonable.

12 We adopt the above rates as satisfying the requirements of AS 42.06.410
13 (b) for the years 1997-2000. These rates are single rates for all Carriers for each
14 year.⁶⁴⁶ Consistent with this order, we allow each Carrier to file individual rates
15 supported by individual actual, historical Carrier costs that justify individual revenue
16 requirements if the sum of the individual annual revenue requirements does not exceed
17 the composite revenue requirement found in this order. If the Carriers do not elect to
18 file separate rates, we will be able to bring our investigation of the capacity settlement
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23 ⁶⁴⁵See Exhibit 46 for calculation. The tariffs to the Valdez Marine Terminal, for
24 1999 and 2000, are not calculated because during those years no intrastate shipments
25 were made to Valdez.

26 ⁶⁴⁶Endnote 9 discusses the appropriateness of a single rate for the TAPS.

1 agreement and whether there is competition on this pipeline to a close.⁶⁴⁷ TSM was
2 structured based on the assumption that there would be competition amongst the TAPS
3 carriers. Until recent years, the tariffs have been uniform.⁶⁴⁸ If the Carriers elect to file
4 separate rates, they must do so by January 27, 2003.

5 These rates are different than the Carriers' filed rates. The Carriers shall
6 refund the difference between their filed rates and our calculated rates by January 13,
7 2003.⁶⁴⁹ If adjustments are necessary because the Carriers file and we approve
8 individual Carrier rates, those will be made within thirty days of our final order approving
9 individual rates.

10 Carriers have had the use of shippers' money since it was paid, and an
11 award of interest is appropriate. We do not have a record sufficient to determine the
12 interest due, and require the parties to address that issue in Phase II.

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17 ⁶⁴⁷Docket P-97-6 is titled *In the Matter of the Cancellation of Allocation of*
18 *Capacity Rules by AMERADA HESS PIPELINE CORPORATION; ARCO*
19 *TRANSPORTATION ALASKA, INC.; BP PIPELINES (ALASKA) INC.; EXXON*
20 *PIPELINE COMPANY; MOBIL ALASKA PIPELINE COMPANY; PHILLIPS ALASKA*
21 *PIPELINE CORPORATION; and UNOCAL PIPELINE COMPANY and the Matter of the*
22 *Complaint of the STATE OF ALASKA Concerning Allocation of Trans Alaska Pipeline*
23 *System Capacity and the Petition of TESORO ALASKA PETROLEUM COMPANY for*
24 *an Investigation into Capacity Allocation and the Discontinuance of Use of Certain*
25 *Pump Stations on the Trans Alaska Pipeline System.*

26 ⁶⁴⁸Amerada Hess sold its interest in the pipeline after concluding that existing
agreements amongst the carriers made it uneconomic for any carrier who was not also
a producer to retain an interest in the TAPS. 33 BWF-E, 51 HIGHLY CONFIDENTIAL
Absent separate rates for the Carriers, we will have no cause to investigate these
issues further.

⁶⁴⁹See Endnote 10.

1
2 G. Post-2000 Intrastate TAPS Rates

3 Post-2000 intrastate TAPS rates will be determined based on the Carriers'
4 tariff filings and supporting documentation. To determine rates for 2001 and
5 subsequent years we require the Carriers to file tariff revisions including the information
6 required by AS 42.06.350(a) and 3 AAC 48.275(a).⁶⁵⁰ We will review those filings for
7 consistency with the depreciated original cost methodology described in Part IV of this
8 order. We require the Carriers to make supporting documentation available for review
9 by Commission staff. Because these filings are likely to be suspended at the end of the
10 45-day review period, we set a prehearing conference in this order.

11 H. Rate Case Expense

12 Tesoro protested allocation of rate case expenses and we ordered the
13 Carriers to file quarterly reports of the costs they have incurred litigating this case. The
14 most recently filed reports show that the Carriers have incurred \$14.83 million in legal
15 costs.⁶⁵¹

16 Rate case expense is ordinarily a fairly uncontroversial component of
17 revenue requirement. The actual or estimated cost of the rate case is supplied by the
18 regulated entity. The Commission then looks at the entity's rate case history and
19 applies its own judgment to decide how many years it will be before a new rate case.
20 Typically, rate case expense would be amortized over a three to five-year period.
21 Because we are setting rates for a four-year period it would be reasonable, if this were

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23 ⁶⁵⁰ AS 42.06.440.

24 ⁶⁵¹ *Indicated TAPS Carriers' Eighteenth Litigation Cost Report*, filed August 29,
25 2002; *Seventh Cost Report of Williams Alaska Pipeline Company, L.L.C.*, filed August
26 30, 2002.

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1 an ordinary case, to simply take the total rate case expense, divide it by four, and
2 include that amount in the revenue requirement for each of the years 1997-2000.

3 This case is not an ordinary case. Rate case expense is extremely high.
4 If we assume intrastate shipments over the four-year period of 146,000,000 (100,000
5 barrels per day) and rate case expense of \$15,000,000, each intrastate barrel would
6 pay approximately ten cents in rate case expense.

7 The very high expenditure in this case may be partially justified by the
8 issues, which reach far beyond those in the usual rate case and include issues of first
9 impression before the Commission. To decide this case we considered evidence that
10 spanned a twenty-five year period. The decision in this case will affect future TAPS
11 rates. We, therefore, may treat the rate case expenses incurred in this case differently.

12 The Alaska Pipeline Act requires us to exclude all direct and indirect costs
13 of any unreasonable practices from tarified rates.⁶⁵² We have found that TSM did not
14 produce just and reasonable rates for 1997-2000. Carriers' costs incurred in defending
15 TSM are arguably costs associated with an unreasonable practice. However, we have
16 no record to determine what portion of the Carriers' litigation expenses is reasonable.
17 We also lack a record on whether the reported legal expenses have already been
18 collected in rates. If any party still believes that we should open a proceeding to
19 examine the reasonableness of the Carriers' rate case expenses and determine an
20 appropriate schedule for recovery of those expenses, it may file a request within forty-
21 five days of this order and we will address that issue in Phase II of this case.⁶⁵³

22
23 ⁶⁵²"Following such a determination, the commission shall take appropriate action
24 to ensure that neither the direct nor indirect costs of any unreasonable practices or
25 imprudent expenditures are included in any tariff or rate of a pipeline carrier or are
26 borne by the public of the state." AS 42.06.450.

⁶⁵³AS 42.06.410(b).

VII. FURTHER PROCEEDINGS

Tesoro raises two additional issues. Tesoro request that we 1) audit TSM inputs for 1997-2000⁶⁵⁴ and 2) determine whether duplicative management of TAPS exists making rates excessive.⁶⁵⁵ Tesoro also requested, in the initial filing that began this docket, an opportunity to raise additional issues after it had access to the data supporting TSM rates.

We did not use TSM inputs to set rates for 1997-2000. Therefore, there is no need to audit them. Tesoro may still believe that the operating costs used to set rates are imprudent.⁶⁵⁶ The record, however, does not contain sufficient evidence of 1997-2000 operating cost imprudence. Therefore, we do not order an audit.

The Carriers responded to the allegation that their ownership structure produces duplicative management costs by asserting that their ownership structure is common in the pipeline industry and that they have valid business reasons for maintaining such an ownership structure.⁶⁵⁷

⁶⁵⁴Tr. 5251 (JFB).

⁶⁵⁵JFB-T (E-3) 16-17.

⁶⁵⁶The issue of the reasonableness of TSM inputs and the correct calculation of rates under TSM for 1986-1996 is not resolved by this decision and remains open in Docket P-86-2. *Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 456 (1993); *Re Amerada Hess Pipeline Corp.*, Order P-86-2(56)/P-90-1(26)/P-92-2(23)/P-94-1(28)/P-95-1(7), dated November 30, 1995; *Re Amerada Hess Pipeline Corp.*, Order P-86-2(55)/P-90-1(25)/P-92-2(22)/P-94-1(27)/P-95-1(6), dated June 30, 1996; *Re Amerada Hess Pipeline Corp.*, Order P-86-2(58)/P-90-1(29)/P-92-2(25)/P-94-1(30)/P-95-1(9), dated March 29, 1996; *Re Amerada Hess Pipeline Corp.*, Order P-86-2(57)/P-90-1(27)/P-92-2(24)/P-94-1(29)/P-95-1(8)7, dated January 31, 1996; *Re Amerada Hess Pipeline Corp.*, Order P-86-2(60)/P-90-1(30)/P-92-2(28)/P-94-1(32)/P-95-1(11), dated June 28, 1996; *Re Amerada Hess Pipeline Corp.*, Order P-86-2(62)/P-92-2(31)/P-94-1(37)/P-95-1(17)/P-97-4(2)/P-97-5(2)/P-97-6(2)/P-97-7(2), dated June 30, 1997. Further the issue of public relations expenditures in the 1994 rates remains open in Docket P-94-1. Order P-94-1(1) (Exxon Valdez litigation and settlement costs and post-employment benefits other than pension have been settled. See *Re Exxon Valdez Litigation and Settlement Costs* 1998 WL 1035074 (Alaska P.U.C. Nov. 17, 1998).

⁶⁵⁷T-12 (BWF) 6-10.

1 We do not have a record that would enable us to evaluate expenses
2 associated with TAPS ownership structure. This kind of issue is usually addressed by
3 ordering a management audit. The testimony submitted by Tesoro is not sufficient to
4 justify ordering such an audit for 1997-2000. However, the costs of the TAPS
5 management structure will be at issue when we set rates for 2001 and subsequent
6 years. If any party can demonstrate that a further investigation of this issue for 1997-
7 2000 is justified based on evidence gleaned during this phase of the case they may
8 request a further investigation within 60 days of the date of this order.

9 VIII. ORDER

10 THE COMMISSION FURTHER ORDERS:

11 1. The following filed rates for 1997-2000 calculated pursuant to the
12 Intrastate Settlement Agreement are not just and reasonable:

13 a. Amerada Hess (1997) TL50-300, TL52-300 (changed only to
14 Valdez and Petro Star, not North Pole), TL55-300; (1998) TL58-300; (1999) TL63-300,
15 TL64-300, TL66-300, TL68-300; (2000) TL-70-300, TL71-300.

16 b. ARCO (1997) TL56-301, TL59-301; (1998) TL61-301; (1999) TL
17 66-301, TL68-301; (2000) TL71-301.

18 c. BP (1997) TL56-311, TL60-311; (1998) TL61-311; (1999) TL67-
19 311, TL69-311; (2000) TL73-311, TL75-311.

20 d. Exxon (1997) TL69-304, TL72-304; (1998) TL74-304; (1999)
21 TL80-304, TL81-304, TL83-304; (2000) TL87-304.

22 e. Unocal (1997) TL52-312, TL55-312; (1998) TL56-312; (1999)
23 TL60-312; (2000) TL64-312.

24 f. Mobil (1997) TL52-308, TL55-308; (1998) TL58-308, TL63-308;
25 (1999) TL64-308, TL66-308, TL68-308; (2000) TL70-308.
26

1 g. Phillips (1997) TL53-310, TL55-310, TL58-310, TL59-310; (1998)
2 TL62-310; (1999) TL67-310, TL69-310, TL71-310, TL73-310; (2000) TL77-310, TL78-
3 310, TL79-310.

4 2. The rates for calendar years 1997, 1998, 1999, and 2000 shown on
5 Exhibit 1, Schedule 3 to this order are the Phase I rates for those years, replacing the
6 1997, 1998, 1999, and 2000 filed rates found by this order to be unjust and
7 unreasonable.

8 3. The issue of whether filed 1997-2000 rates are correctly calculated
9 under TSM is moot.

10 4. The rates calculated above are in all cases different than the Carriers'
11 maximum filed rates; see Exhibit 1, Schedule 3. By 4:00 p.m., January 13, 2003, the
12 Carriers shall refund the difference between their filed rates and our calculated rates.

13 5. Consistent with this order, each Carrier may file individual rates
14 supported by individual Carrier actual, historical costs that justify individual revenue
15 requirements if the sum of the individual revenue requirements does not exceed the
16 composite annual revenue requirements found in this order. If the Carriers elect to file
17 separate rates, they must do so by 4:00 p.m., January 27, 2003.

18 6. If the Carriers file and we approve individual Carrier rates, we will order
19 appropriate adjustments to the refund amounts within thirty days of our final order
20 approving individual rates.

21 7. The request made by Tesoro Alaska Company for a Commission audit
22 of 1997-2000 operating expenses is denied.

23 8. The request made by Tesoro Alaska Company to investigate
24 duplicative management costs incurred in 1997-2000 is denied without prejudice.

25 9. By 4:00 p.m., January 13, 2003, Tesoro Alaska Company or any other
26 party may request an investigation into duplicative management costs and must provide

1 sufficient evidence that those management costs were imprudent to justify an
2 investigation.

3 10. By 4:00 p.m., January 13, 2003, any part may request investigation
4 into rate case expense.

5 11. A prehearing conference to set the schedule Phase II of this docket
6 shall convene at 10 a.m. March 4, 2003, in the East Hearing Room of the Regulatory
7 Commission of Alaska, 710 West Eighth Avenue, Suite 300, Anchorage, Alaska. The
8 parties should be prepared to submit a proposed procedural schedule at the prehearing
9 conference.⁶⁵⁸ The parties should be prepared to discuss a schedule for resolving the
10 issues identified in Ordering Paragraph Nos. 9 and 10 above and the issue of interest
11 owing on Carriers' refunds.

12 12. A prehearing conference to set the schedule for the 2001 rate case
13 shall convene immediately following the prehearing conference scheduled in Ordering
14 Paragraph No. 11, in the East Hearing Room of the Regulatory Commission of Alaska,
15 710 West Eighth Avenue, Suite 300, Anchorage, Alaska. The parties should be
16 prepared to submit a proposed procedural schedule at the prehearing conference.⁶⁵⁹

17 13. Using the depreciated original cost methodology of Part IV of this order
18 to set rates for 1997, 1998, 1999, and 2000 and the information required by
19 AS 42.06.350(a) and 3 AAC 48.275(a) the Carriers shall either together or individually
20 calculate revenue requirements and rates for 2001 and subsequent years. By 4:00
21 p.m., January 13, 2003, the Carriers shall either together or individually file tariff
22

23 ⁶⁵⁸ If you are a person with a disability who may need a special accommodation,
24 auxiliary aid, or service or alternative communication format in order to participate in this
25 prehearing conference, please contact Jennifer Guigley at 1-907-276-6222 or TTY 1-
26 907-276-4533 to make the necessary arrangements.

⁶⁵⁹ See n.658.

1 revisions including the information required by AS 42.06.350(a) and 3 AAC 48.275(a).
2 The 2001 test year will be used to set rates for 2001 and subsequent years.

3
4 DATED AND EFFECTIVE at Anchorage, Alaska, this 27th day of November, 2002.

5 BY DIRECTION OF THE COMMISSION
6 (Commissioners Bernie Smith and
7 Will Abbott, not participating)

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X. ENDNOTES

ENDNOTE 1 CITATIONS TO THE RECORD AND ORDER EXHIBITS

Prefiled testimony for the Carriers, the State, and the Public Advocacy Section (PAS) are designated with a one-letter prefix, T for Carriers (TAPS Carriers), S for State, and P for PAS, followed by a hyphen and then a number indicating the position of the testimony in that party's list of prefiled testimony. Those official designations of testimony are followed in this Order by a parenthesis containing the initials of the witness to whose testimony we refer. For example, T-1 is the official designation of the prefiled testimony of Carriers' witness Adam B. Jaffe. We cite to that testimony as T-1 (ABJ).

Prefiled testimony for Tesoro and Williams are designated with a three-letter prefix followed by a hyphen and then the letter T. The three letters are the initials of the witness testifying. The letter T in this context means testimony, not TAPS Carriers. The initials and letter T are followed by a parenthesis which contains the single letter designation of the party sponsoring the testimony, E for Tesoro and W for Williams, followed by a number indicating the position of the testimony in that party's list of prefiled testimony. For example, KAW-T (E-1) is the prefiled testimony of Tesoro witness Kenneth A. Williams. These are the official record designations for Tesoro and Williams prefiled testimony and also the way we cite them in this order.

Prefiled exhibits for all parties begin with a three-letter prefix followed by a number. The three letters are the initials of the witness sponsoring the exhibit. For example, ABJ-1 is the first prefiled exhibit of the witness Adam B. Jaffe. These are the official record designations of the exhibits and the ones we use in this order. It is unnecessary to add a designation of the party sponsoring the exhibit because prefiled exhibits are sponsored by the party for whom the sponsoring witness is testifying.

Hearing exhibits are numbered sequentially 1 through 259, followed by a hyphen and the initials of the witness during whose testimony the exhibit was marked, then followed by another hyphen and the one-letter designation of the party who asked that the exhibit be marked. For example, 1-ABJ-E is a hearing exhibit marked by Tesoro during its examination of Adam B. Jaffe. A hearing exhibit containing the party designation R was marked by Williams Alaska Pipeline Company, L.L.C. Hearing exhibits requested by the Commission at the hearing contain the designation C following the number and initials of the witness testifying at the time.

Both prefiled exhibits and hearing exhibits are cited by their exhibit designation only. The word Exhibit does not appear in front of the exhibit designation. The word Exhibit followed by a number in this order refers to exhibits appended to this order, rather than to exhibits in the underlying record.

The transcript is cited first by the designation Tr. and the page or pages of the transcript being cited. (Transcript volume numbers are not included in the citation and line numbers on a page are not cited.) The transcript cite is followed by a parenthesis containing the initials of the witness testifying. For example, a portion of the examination of Adam B. Jaffe at the hearing would be cited as Tr. 1605 (ABJ). The hearing transcript in this case begins at Tr. 1524 and ends at Tr. 5673.

The letter designation of each witness and the party sponsoring that witness are listed below in alphabetical order of their initials.

1	ABJ	Adam B. Jaffe	Carriers
	BEW	Bruce E. Warner	Williams
2	BWF	Billy W. Folmar	Carriers
	FJH	Frank J. Hanley	Tesoro
3	JEH	Jerome E. Haas	State
	JFB	John F. Brown	Tesoro
4	JSG	J. Stephen Gaske	Williams
	KAW	Kenneth A. Williams	Tesoro
5	KBJ	Kenneth B. Johnston	Williams
	LPS	Leon P. Smith	Carriers
6	RAF	Richard A. Fineberg	PAS
	RGV	Robert G. Van Hoecke	Carriers
7	WBT	William B. Tye	Carriers
	WDVD	William Van Dyke	State

8

9 The record also contains testimony and exhibits of certain witnesses in Phase I

10 of the original TAPS litigation. The Phase I testimony and exhibits which were entered

11 into our record were written and filed in the late 1970s. The witnesses who compiled

12 the testimony and exhibits were cross-examined at the Phase I hearing in 1978-79, but

13 that hearing testimony has not been entered into our record. The Carriers' witness Tye

14 attached the prefiled testimony and exhibits of certain Phase I witnesses for the Carriers

15 to his testimony in this proceeding. During Tye's cross-examination Tesoro and

16 Williams introduced the prefiled testimony and exhibits of other parties from Phase I.

17 When an exhibit containing Phase I prefiled testimony is cited, the exhibit

18 designation will be followed by a parenthesis containing the last name of the Phase I

19 witness. The full names of each Phase I witness whose testimony is contained in this

20 record, alphabetized by last name; the Phase I party for whom the witness testified; and

21 the exhibit in which that witness's testimony appears in this record are:

22	WITNESS	PHASE I PARTY	P-97-4 EXHIBIT
23	Arrow, Kenneth J.	Exxon Pipeline	WBT-29
24	Carter, Jared	BP Pipelines	WBT-18
25	Cooper, Joe L.	Mobil Alaska Pipeline	WBT-20
26	Donaldson, Richard M	Standard Oil etc.	WBT-17
27	Dunn, John C.	State of Alaska	83-WBT-W
28	Foster, J. Rhodes	ARCO Pipeline	WBT-31
29	Gary, Raymond B.	Exxon Pipeline etc.	WBT-26, WBT-27
30	Hall, William J.	Mobil Alaska Pipeline	WBT-21
31	Moolin, Frank P., Jr.	Mobil Alaska Pipeline	WBT-19
32	Nathan, Robert R.	BP Pipelines	WBT-28
33	Olson, Charles E.	Amerada Hess Pipeline	WBT-56
34	Parcell, David	State of Alaska	67-WBT-E
35	Patton, Edward L.	Mobil Alaska	WBT-15, WBT-16
36	Price, Harold C.	Mobil Alaska Pipeline	WBT-22
37	Roseman, Herman G.	U.S. Dept. of Justice	66-WBT-E
38	Ryan, John	Exxon Pipeline	WBT-32
39	Solomon, Ezra	Exxon Pipeline	WBT-33
40	Spahr, Charles E.	Standard Oil	WBT-23
41	Stich, Robert S.	Union Alaska Pipeline	WBT-34

Whitehouse, Alton W., Jr.	Standard Oil	WBT-24
Wilson, John W.	Arctic Slope Regional Corp.	65-WBT-E
Woody, L. Dale	Exxon Pipeline	WBT-25

The Exhibits prepared by this Commission and appended to the order fall into several groupings. They are summarized below.

- Exhibit 1 summarizes and compares just and reasonable rates to the Carriers' filed rates. Exhibits 3 and 4 use other tests to find the Carriers' filed rates unjust and unreasonable.
- Exhibits 4 and 7 confirm that the rate base that we adopt in Part IV Section E is reasonable.
- Exhibit 5 and 6 show that the Carriers' unrecovered investment analysis fails to support their benchmark rates.
- Exhibits 9, 10, 12, and 16 summarize positions by the parties on various inputs necessary to determine a reasonable 1996 year-end rate base.
- Exhibits 2, 8, 11, 13-15, and 17-28 consist of findings that allow us to determine a reasonable year-end 1996 rate base, which we do at Exhibit 29.
- Exhibit 30 summarizes the parties' positions on operating expenses for 1977-1996.
- Exhibit 31 and 32 consist of findings that allow us to determine reasonable revenue requirements for 1977-1996, which we do at Exhibit 33. This allows us to confirm in Exhibit 7 the rate base that we adopt.
- Exhibit 34 shows the Carriers' position on capital structure for 1997-1999.
- Exhibits 35-45 consist of findings that allow us to calculate just and reasonable rates, which we do following the practice of the parties at Exhibit 46.

Exhibits concerned with establishing and testing the year-end 1996 rate base are displayed to the nearest million. However, exhibits make use of the exact figures submitted electronically.

ENDNOTE 2 BRIEF DESCRIPTION OF TAPS RATE LITIGATION

Following is a brief description of the TAPS litigation history in general and the litigation history of these consolidated dockets.

A. TAPS Litigation History

Rates for transportation of oil on TAPS have been the subject of litigation almost without interruption since 1977, when the Carriers filed their initial rates.⁶⁶⁰ However, the issues we address here have never been decided. Rates filed under TSM have never been reviewed to determine if they are just and reasonable.

⁶⁶⁰In past litigation the parties have spent millions of dollars and ten years trying to resolve what the appropriate rates should be for shipping oil on TAPS. In this docket alone litigation costs for the Indicated TAPS Carriers have exceeded \$14.83 million. *Indicated TAPS Carriers Eighteenth Cost Report*, filed August 29, 2002; *Williams Alaska Pipeline Company, L.L.C.'s Seventh Cost Report*, filed August 30, 2002.

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1 The original TAPS rate litigation occurred in two phases. Phase I, conducted in
2 1978 and 1979, examined rate base/rate of return methodology, including treatment of
3 taxes. Phase II, conducted from 1982 through 1985, was divided into two portions: cost
4 of construction and all other costs. The cost of construction portion involved the
prudence of certain TAPS construction expenditures. The non-cost of construction
portion addressed depreciation charges, AFUDC, DR&R costs, and all other issues not
decided in Phase I.⁶⁶¹

5 Federal and state regulators conducted the two phases concurrently. The
6 federal agencies were the Interstate Commerce Commission and later the FERC. The
state agencies were our predecessor agencies: first, the APC, and later, the APUC.

7 Administrative Law Judge Max L. Kane, who presided over the Phase I hearings
8 for the FERC, issued his initial decision in February 1980.⁶⁶² Parties took exception to
9 that decision and it remained before the FERC until 1982, when the FERC, without
10 opinion, remanded the case for further evidence to determine whether a FERC decision
11 establishing a ratemaking methodology for oil pipelines generally, should be applied to
12 TAPS.⁶⁶³ The agencies compiled a record in the Phase I remand but the parties settled
the federal rate proceeding before the FERC decided the matter.

13 The APC, however, issued its Phase I decision on September 17, 1980. The
14 decision consisted of two orders, Order 25⁶⁶⁴ and Order 26.⁶⁶⁵ In Order 25, the APC
15 established a ratemaking methodology for TAPS. In Order 26 the APC used the Order
16 25 methodology to set rates to the GVEA connection for four of the Carriers. The
17 parties appealed Orders 25 and 26 to the Alaska superior and Supreme courts.

18 While Orders 25 and 26 were on appeal, from 1982 through 1984, the parties
19 continued Phase II proceedings before the FERC and the APUC. In 1982, as a part of
20 Phase II, the parties stipulated to the life of the line for depreciation purposes as well as
21 to a straight-line depreciation schedule.

22 In July 1984, MAPCO Alaska Petroleum Inc. (the predecessor of Williams Alaska
23 Petroleum Inc. (Williams)), an intrastate shipper, settled the Order 26 issues with the
24 Carriers. As part of the settlement, the parties moved to dismiss the appeal of Order
25 26. In November 1985, the Supreme Court dismissed the appeal of Order 26. The

26
⁶⁶¹The record in Phases I and II is massive. Eighty-two witnesses testified in
Phase I. Nine hundred and fifty exhibits were introduced. The Phase I transcript,
including pre-filed testimony and cross-examination, is 24,000 pages long. One
hundred and thirty six witnesses testified in the cost of construction portion of Phase II.
The transcript, which includes cross-examination only, is 26,000 pages long. More than
8,000 Phase II cost of construction exhibits, including the pre-filed testimonies of the
witnesses, exist. The Phase II non-cost of construction record includes the testimony of
45 witnesses. There are 5,300 pages of cross-examination transcript and 1125
exhibits, including the pre-filed testimonies of the witnesses.

⁶⁶²*Trans-Alaska Pipeline Sys.*, 10 F.E.R.C. ¶ 63,026.

⁶⁶³*Trans Alaska Pipeline Sys.*, 21 F.E.R.C. ¶ 61,092.

⁶⁶⁴*Re Exxon Pipeline Co.*, 1 APUC 580 (1980).

⁶⁶⁵*Re Amerada Hess Pipeline Corp.*, 1 APUC 606 (1980).

1 Supreme Court also dismissed Order 25 because it no longer contained rates requiring
2 review.

3 Meanwhile, in June 1985, the State and five of the eight TAPS Carriers agreed to
4 settle the federal TAPS rate litigation. A sixth Carrier later joined the settlement. In
5 October 1985, the FERC accepted the Interstate Settlement Agreement. The Interstate
Settlement relied on TSM as the method for calculating interstate maximum ceiling rates
for those six carriers. The remaining two carriers joined the settlement in February
1986, and the FERC accepted the final settlement in June 1986.⁶⁶⁶

6 The State and all eight TAPS Carriers reached a similar settlement of intrastate
7 rates in April 1986.⁶⁶⁷ The Settlement purported to resolve all issues then pending
including the pre-1985 contested rates. The Settlement agreed to TSM as the method
for calculating a maximum intrastate ceiling rate for future years.⁶⁶⁸

8 On May 30, 1986, the APUC opened Docket P-86-2 to consider the Intrastate
9 TAPS Settlement concerning past and future intrastate TAPS rates. One year later on
10 May 30, 1987, the Commission issued Order P-86-2(14) accepting settlement rates for
11 periods before July 11, 1986, ordering refunds to intrastate shippers based on those
12 accepted rates, and terminating the Commission's investigation into rates for shipments
before July 11, 1986.⁶⁶⁹ The APUC required as a condition of accepting the Settlement
that the Carriers in the future file intrastate rates no higher than those calculated under
TSM.⁶⁷⁰ The Commission accepted the Settlement because all economically impacted
parties had expressly or presumed consented to the imposition of the settlement rates
for the period before July 17, 1986.⁶⁷¹

13 However, on July 10, 1986, Petro Star Inc. (Petro Star), an economically
14 impacted party, challenged the filed rates. Because of Petro Star's protest, the APUC
15 found that it must determine whether rates for periods after July 10, 1986, were just and
reasonable under the Alaska Pipeline Act, not just whether the Settlement was in the
public interest.⁶⁷²

17 ⁶⁶⁶*Trans Alaska Pipeline Sys.*, 33 F.E.R.C. ¶61,064 (1985); *Trans-Alaska*
18 *Pipeline Sys.*, 35 F.E.R.C. ¶61,425 (1986). Arctic Slope Regional Corporation appealed
19 the approval of the Interstate TAPS Settlement Agreement but in October 1987, the
United States Court of Appeals for the District of Columbia Circuit affirmed FERC's
20 approval. The United States Supreme Court denied *certiorari* in October 1988. *Arctic*
Slope Reg'l Corp. v. F.E.R.C., 832 F.2d 158 (D.C. Cir., 1987), *cert. denied*, 488 U.S.
21 868 (1988). The federal portion of the TAPS rate litigation lasted eleven years from
beginning to end.

22 ⁶⁶⁷BWF-2.

23 ⁶⁶⁸For a brief explanation of TSM, see Endnote 3, *infra*.

24 ⁶⁶⁹*Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 169 (1987).

25 ⁶⁷⁰*Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 171 (1987).

26 ⁶⁷¹*See Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 169 (1987).

⁶⁷²*Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 169 (1987).

1 Petro Star later settled with the Carriers.⁶⁷³ In October 1993, the APUC accepted
2 the Settlement for the calculation of rates after July 11, 1986, but did not vacate the
3 suspension of those rates. The APUC specifically did not find that the 1986 filed rates
4 were just and reasonable. Instead, with two dissenting Commissioners,⁶⁷⁴ the APUC
5 accepted the Settlement as in the public interest because no economically interested
party protested.⁶⁷⁵ The APUC stated that any future challenge to the rates would be
evaluated as if the APUC had not accepted the Settlement, i.e., without giving any
weight to the finding that the Settlement was in the public interest when it was

6 ⁶⁷³*Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 452 (1993).

7 ⁶⁷⁴In dissenting, Commissioner Foster explained,

8 Among the most egregious departures is the violation of the basic
9 principle that rates should be based on actual costs and that the carrier is
entitled to earn a reasonable return on its investment. The 35cent/barrel (in
10 1983 dollars) "incentive" provision which took affect in 1990 has no basis in
cost and clearly goes beyond a reasonable return on actual investment. . . .
11 This Settlement provides a windfall return to carriers with its so-called
"incentive " return component. Shippers are in essence being asked to pay
12 more than once for an investment. This is not a fair balance of the interests
of shippers and carriers.

13 *Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 462-63 (1993). Commissioner
Knowles concurred with Commissioner Foster regarding the allowance per barrel. Both
14 Commissioners also found the approach to DR&R inappropriate. Commissioner
Knowles explained,

15 Two other objectionable features to TSM concern DR&R. The
16 DR&R amounts to be collected each year are fixed and cannot be changed
under TSM. There is no mechanism to adjust collections for DR&R to
17 reflect known and measurable changes which may occur during the
remaining life of the pipeline. The result may be overcollection or
18 undercollection, both of which are undesirable. . . I cannot endorse a
method which permits the TAPS Carriers knowingly to under collect or over
19 collect their cost of service. The other unacceptable feature of the DR&R
provisions of TSM is the fact that there is no mechanism by which excess
20 DR&R funds can be refunded to ratepayers in the event that some or all of
the currently anticipated DR&R work is ultimately unnecessary for whatever
21 reason. The pipeline is not scheduled to be shut down for another 18
years. Circumstances could change significantly in that time period. The
22 TAPS Carriers should not be allowed to retain monies collected for DR&R
which are not used for that purpose. Those monies belong to the
23 ratepayers.

24 *Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 460 (1993), Commissioner Foster
agreed, "the Settlement proposes a DR&R fund that is not consistent with Commission
25 policy and creates a windfall for carriers at the expense of shippers." *Id.* at 464.

26 ⁶⁷⁵*Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 456 (1993).

1 uncontested.⁶⁷⁶ The APUC made the entire prior record from Phases I and II available
2 for any future rate challenges.⁶⁷⁷

3 After accepting the Settlement, the APUC continued to suspend annual rates,
4 pending review of whether the rates were correctly calculated under TSM and contained
5 acceptable input data.⁶⁷⁸ The APUC never ruled on the post-1986 rates. Therefore, the
6 correct calculation of TAPS rates using TSM and acceptable input data are issues still
7 before us.⁶⁷⁹

8 B. History of P-97-4

9 The Carriers continued to file TAPS rates under Order 41 and the ongoing review
10 described above. The Commission continued to accept those rates until December 23,
11 1996. On that date Tesoro protested the 1997 filed rates. MAPCO Alaska Petroleum
12 Inc. intervened and the APUC designated Staff (whose successor is Public Advocacy
13 Section of the Regulatory Commission of Alaska (PAS)) as a party. Therefore, the
14 correct calculation under TSM and the acceptability of input data are issues for all
15 intrastate rates filed after the 1985 Settlement and are being investigated in Docket
16 P-86-02. We opened Docket P-97-4 to review post-1996 rates to determine if they are
17 just and reasonable under AS 42.06.370. We opened Docket P-97-7 to address issues
18 of appropriate DR&R collection and allowances.

19 On January 12, 1998, the Carriers moved to terminate the investigation in
20 Dockets P-97-4 and P-97-7, observing that Tesoro's protest was a direct assault on
21 TSM, DR&R and the Allowance Per Barrel return elements of TSM. They asserted that
22 these issues could not be re-examined without reopening the full array of TAPS rate

23 ⁶⁷⁶*Id.*

24 ⁶⁷⁷*Re Amerada Hess Pipeline Corp.*, 8 APUC 168, 171 (1987). The parties in
25 Docket P-97-4 have in fact introduced extensive portions of the Phase I record into
26 evidence in this proceeding. Although the entire record for the Phase I and Phase II of
the joint federal/state proceedings was available for use in this docket, the record for
this docket now consists only of those matters that were specifically introduced into this
docket's record during the proceedings held for this docket.

⁶⁷⁸*Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 456 (1993).

⁶⁷⁹In this proceeding, we combined the issue of the correct calculation and use of
acceptable input data for the 1997-2000 rates with determining whether the 1997-2000
rates are just and reasonable. *Re Amerada Hess Pipeline Corp.*, Order P-86-2(61)/P-
92-2(30)/P-94-1(36)/P-95-1(16)/P-97-4(1)/P-97-5(1)/ P-97-6(1)/P-97-7(1), dated June
27, 1997; *Re Exxon Valdez Litigation and Settlement Costs*, Order P-94-1(46)/P-95-
1(26)/P-97-4(12)/P-97-6(11)/P-97-7(11)/P97-9(5), dated December 26, 1997; *Re Exxon
Valdez Litigation and Settlement Costs*, Order P-94-1(54)/P-95-1(33)/P-97-4(35)/P-97-
6(20)/P-97-7(21) dated December 28, 1988; *Re Exxon Valdez Litigation and Settlement
Costs* Order P-94-1(75)/P-97-4(64)/P-97-6(41)/P-97-7(46), dated December 20, 1999.
We have not determined whether the input data for 1986-1996 is reasonable, although
we opened Docket P-86-2 when a protest was filed. We have not closed that docket
because until this case was resolved, the significance of adjustments to those years
was unknown. The issue is now ripe and we encourage the parties to include an
appropriate resolution of those issues in any settlement discussions they may have.

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1 issues that the Settlement resolved.⁶⁸⁰ The Carriers asked the Commission to use its
2 discretion to decline to reopen TAPS rate issues because these burdens outweighed
3 any Tesoro interest in rates. They also asserted that if intrastate rates were lowered,
4 there would be an immediate, off setting increase in interstate rates, resulting in
5 detriment to interstate shippers and State revenues.⁶⁸¹ They further asserted that a
6 disparity between intrastate rates and interstate rates could lead to a FERC proceeding
7 under Section 13(4) of the Interstate Commerce Act wherein FERC could invalidate
8 RCA rates and set its own intrastate rates.⁶⁸²

9 In response, the APUC explained that “where no economically impacted party
10 contests the rates, the public interest may tilt toward allowing unproven rates to be
11 charged in lieu of conducting costly proceedings”⁶⁸³ However, when a rate payer
12 challenges unproven rates that it is paying, the Commission should not refuse to
13 investigate those rates unless the party challenging rates is somehow precluded from
14 challenging them.⁶⁸⁴ Although the Settlement precludes the State from challenging
15 rates filed in accordance with the Settlement, Tesoro is not similarly restricted.⁶⁸⁵ The
16 APUC concluded that to terminate the investigation and require an economically
17 impacted party to pay, over its objection, rates that have not been fully justified as
18 required by AS 42.06 would constitute de facto deregulation of TAPS.⁶⁸⁶ The APUC,
19 therefore, denied the Carriers’ motion to terminate.⁶⁸⁷ This history explains why this is
20 the first time that the rates filed pursuant to TSM have been reviewed to determine if
21 they are just and reasonable.

22 The Carriers filed their case-in-chief with the APUC on October 8, 1998, stating
23 that “the principal question presented is whether the TAPS Settlement Methodology will
24 continue to govern the TAPS Carriers’ maximum intrastate rates.”⁶⁸⁸ On March 15,

25 ⁶⁸⁰*TAPS Carriers’ Motion to Terminate Investigation* at 22.

26 ⁶⁸¹*Id.* at 20.

⁶⁸²*Id.*, at 20-21; *TAPS Carriers’ Reply in Support of Motion to Terminate
Investigation* at 24. We disagree. See Endnote 7 for a discussion of the Carrier
assertion that Section 13(4) of the Interstate Commerce Act gives the FERC the
authority to order an increase in intrastate rates to avoid an undue burden on interstate
shippers.

⁶⁸³*Re Amerada Hess Pipeline Corp.*, P-97-4(21)/P-97-7(16) at 14 (May 5, 1998).

⁶⁸⁴*Id.* at 14-17.

⁶⁸⁵*Id.* at 14. The Settlement does not limit the rights of future shippers to protest
future rates. However, it limits the State of Alaska’s protest right to only those tariffs
which are inconsistent with the terms of the Settlement. BWF-2. Therefore, the State of
Alaska is precluded from challenging the rates at issue in this docket. The Intrastate
TAPS Settlement Agreement is only binding upon signatory parties and not upon third
parties. *Id.* at 17, 19.

⁶⁸⁶*Id.* at 15.

⁶⁸⁷Further, failing to investigate rates places a chilling effect on non-Carrier
shippers desire to ship. It also arguably reduces the incentive for non-pipeline owners
to explore for additional oil on the North Slope.

⁶⁸⁸*TAPS Carriers’ Covering Brief* at 2.

1 1999, Tesoro moved for summary disposition because it contended that the Carriers
2 failed to prove that the filed rates were just and reasonable.

3 The Carriers' described their initial filing as showing that:

4 (a) TSM must be evaluated as an integrated whole and from the perspective
5 of the 1985-86 time period in which the TAPS Settlement Agreement came
6 into being;

7 (b) from that perspective, TSM was expected to produce reasonable rates
8 and returns and has performed as the parties intended;

9 (c) TSM is a reasonable, cost-based ratemaking methodology that was
10 designed to serve, and has served, important public policy goals benefiting
11 the State of Alaska ("State") and TAPS shippers;

12 (d) if TSM had not been adopted, rates derived under more traditional
13 ratemaking methodologies would have been significantly higher during 1997
14 and 1998 than the TSM derived rates actually being charged; and

15 (e) the public interest benefits that strongly supported the Commission's
16 approval (*sic-acceptance*) of TSM have been realized and continue to justify
17 its retention.⁶⁸⁹

18 After reviewing extensive briefing, we granted Tesoro's motion, finding that

19 despite the inordinate amount of briefing and expert testimony on TSM, the
20 Commission is not determining whether TSM is a just and reasonable
21 methodology over the life of the pipeline. Rather, the Commission must
22 address whether the resulting rates in 1997 and 1998 are just and
23 reasonable.⁶⁹⁰

24 Further, we found that to the extent that non-cost based factors of TSM were
25 included in the filed rates, the Carriers failed to provide a reasoned explanation. We
26 instructed that once rates are challenged, at issue is whether the filed rates are just and
reasonable under AS 42.06, not whether a settlement methodology will continue to be
used to set the maximum rate level. We reiterated the direction of the APUC in
originally allowing TSM rates. The APUC clearly stated TSM rates "would be subject to
the same *standards* and *procedures* to which [they] would have been subject if the

⁶⁸⁹*Id.*, at 2.

⁶⁹⁰*Re Amerada Hess Pipeline Corp.*, P-97-4(79) at 8-9 (April 10, 2000). We also
suspended and address in these dockets whether the 1999 and 2000 rates are just and
reasonable. Even if the reasonableness of a methodology over the life of the line could
be a sole test for meeting the requirements of AS 42.06, our analysis in Section V
demonstrates that in this case the filed rates produced by TSM over the life of the line
produce an excessive opportunity to recover costs. See Part V, B. *supra*.

1 Intrastate Settlement Agreement had not been accepted.”⁶⁹¹ We explained that
2 determining whether rates are just and reasonable begins with costs.⁶⁹² Non-cost
factors may be considered if specifically justified.⁶⁹³

3 Although we granted Tesoro’s motion for summary judgment, we did not decide
4 whether the filed rates were just and reasonable. Instead, we provided the Carriers a
5 second opportunity either to file a case supporting their 1997-2000 filed rates as just
6 and reasonable under the AS 42.06 or to file different rates with support showing that
the new rates were just and reasonable. We established a procedural schedule
allowing the Carriers to file a new case-in-chief, the protestants to file answering
testimony and the Carriers to file rebuttal testimony. We also scheduled a hearing and
ordered pre- and post-hearing briefing.⁶⁹⁴

7 On January 26, 2001, the Carriers moved to strike portions of the protestants’
8 testimony that addressed the issue of DR&R. They asserted that they were unaware
that DR&R issues were a part of Docket P-97-4 and had presumed DR&R issues would
be addressed only in Docket P-97-7.⁶⁹⁵

9 In 1985, as a part of the Settlement, the parties stipulated to the size of the
10 ultimate DR&R obligation, the method for calculating the funds necessary to meet those
obligations, and the role that DR&R obligations play in the overall settlement
11 methodology established to calculate TAPS rates.⁶⁹⁶ Once Tesoro challenged the 1997
rates, however, the Carriers were on notice that they would need to support the DR&R
12 element of their rate calculation along with all other elements involved in a rate
calculation.⁶⁹⁷

13 We therefore denied the Carrier motion to strike, consolidated the two dockets,
14 and granted the Carriers an extension of time to file rebuttal testimony in the
consolidated P-97-4 and P-97-7 proceeding.⁶⁹⁸ We explained,

17 _____
18 ⁶⁹¹*Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 456 (1993) (*emphasis*
added) and n.28, *supra*.

19 ⁶⁹²*Re Amerada Hess Pipeline Corp.*, Order P-97-4(79) at 9, 11 (April 10, 2000).

20 ⁶⁹³*Id.*, at 10.

21 ⁶⁹⁴*Re Amerada Hess Pipeline Corp.*, P-97-4(79) at 15 (April 10, 2000).

22 ⁶⁹⁵*Indicated TAPS Carriers’ Motion to Strike Testimony Relating to Dismantling,*
Removal and Restoration, or, In the Alternative, For an Extension of Time to File
Rebuttal Testimony, filed January 26, 2001.

23 ⁶⁹⁶29-ABJ-W at 11-13.

24 ⁶⁹⁷The Carriers were on notice as early as February 28, 1998. *Tesoro’s*
Opposition to Motion to Terminate at 30 n.5.

25 ⁶⁹⁸*Re Amerada Hess Pipeline Corp.*, Order P-97-4(118)/P-97-7(78), dated
February 16, 2001.

1
2 issues of whether the appropriate amount and management of DR&R can be
3 separated from the issues of whether, as part of a filed rate, DR&R amounts
4 collected in 1997-2000 produce just and reasonable rates.⁶⁹⁹

5 We further explained that we would rule on whether the 1997 filed TAPS rates
6 are just and reasonable after the April 2001 hearing if we could.⁷⁰⁰

7 Based on the record before us, we can determine whether the 1997 filed rates
8 are just and reasonable but without reference to DR&R costs and revenue. We
9 determine rates and refunds for 1997-2000 and address the DR&R issues in Phase II of
10 this proceeding, after a full opportunity for discovery, pre-filed testimony and hearing. In
11 that proceeding we will decide whether additional DR&R funds need to be collected or
12 refunds issued post-1996.

13 After we consolidated P-97-4 and P-97-7, the parties filed cross motions for
14 summary disposition, which we denied.⁷⁰¹ Based on the extensive record in these
15 consolidated dockets, we determine whether the 1997-2000 filed rates absent
16 consideration of DR&R expenses and revenues are just and reasonable under the
17 Alaska Pipeline Act.

18 ENDNOTE 3 THE TAPS SETTLEMENT METHODOLOGY

19 *Re Amerada Hess Corporation*⁷⁰² contains a brief description of the TAPS
20 Settlement Methodology (TSM).

21 TSM is a formula for calculating tariffs of the seven TAPS Carriers
22 beginning in the year 1977 and continuing through the year 2011. Although
23 development of rates under TSM is complicated by several elements such as
24 net carryover, calculation of rates for different types of petroleum
25 (Sadlerochit, Kuparuk, etc.), calculation of rates to the intermediate points,
26 and separation of rate base into 'original' and 'new' for purposes of providing
a different basis for calculating rate of return after 1990, the underlying
methodology itself is relatively straightforward.

The methodology embodied in TSM is basically a trended original cost
methodology (TOC or TOC methodology). TOC differs from the depreciated
original cost methodology (DOC or DOC methodology), the method normally
used by the Commission, in the manner in which investors are compensated
for inflation. Under DOC, investors receive a nominal rate of return on the
original cost of plant net of accrued depreciation. The nominal rate of return
includes a premium to compensate investors for expected inflation. Under
TOC, investors are compensated for inflation through rate base write-ups
equal to expected inflation.

⁶⁹⁹ *Id.*, at 12.

⁷⁰⁰ *Id.*

⁷⁰¹ Order P-97-4(130)/P-97-7(89), dated April 3, 2002.

⁷⁰² *Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 458-59 (1993).

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1 Under TSM a real return on total rate base of 6.4 percent is included
2 in the revenue requirement each year (until 1990), and the rate base (except
3 for land and working capital) is written up each year for inflation as measured
4 by the Consumer Price Index for All Urban Consumers. That writeup is
included in an account called Deferred Return which is added to carrier
property to arrive at total rate base which is then used to compute returns in
succeeding years.

5 Although application of a TOC methodology usually results in fairly
6 level rates over time, TSM results in declining rates over time because of its
7 depreciation profile. Under TSM, property is depreciated and Deferred
8 Return is recovered under a schedule which is more accelerated than
straight-line and which apparently has no particular rationale other than that
the parties agreed to it. Rate base declines very rapidly under this
depreciation schedule as does return on rate base.

9 In order to give the TAPS Carriers an incentive to continue to operate
10 the line, TSM provides for a profit element of 35 cents per barrel (adjusted for
inflation since 1983) to be collected in lieu of a return on rate base after 1990
11 (35-cent provision). In order to give the TAPS Carriers an incentive to make
appropriate investments after 1990, the rate base is divided into 'original' and
12 'new' portions. In addition to the 35 cents per barrel adjusted for inflation, the
TAPS Carriers continue to earn the 6.4 percent return on 'new' rate base in
1990 and thereafter.

13 Under the provisions of the settlement each Carrier calculates its own
14 tariff but that tariff is based on a common revenue requirement for the entire
TAPS operation. The revenue requirement consists of the sum of the
15 following elements: operating expenses; dismantling, removal, and
restoration (DR&R) allowance; depreciation; recovery of deferred return;
16 after-tax margin (6.4 percent return on total rate base prior to 1990 and 35
cents per barrel plus 6.4 percent return on new rate base in 1990 and
17 thereafter); and income tax allowance. Any nontransportation revenues
collected by the Carriers are subtracted from the revenue requirement.

18 Under TSM, the TAPS Carriers collect a fixed dollar amount for DR&R
19 each year. These amounts do not change based on any change in either the
obligation to perform DR&R or the cost of performing it. If the Carriers are
20 not required to perform DR&R or it costs them less to perform it than the
amount collected under TSM, the Carriers presumably retain the leftover
21 DR&R amounts. Conversely, if DR&R is more expensive than originally
contemplated, the Carriers and their parent companies are responsible for
22 making up the difference and performing the DR&R.

23 Income tax allowance is calculated under the assumption that the
entire amounts of those TSM elements entitled Recovery of Deferred Return
24 and After- Tax Margin are fully taxable. Thus, the tax allowance is calculated
as though the TAPS Carriers had a 100 percent equity capital structure. The
25 difference between book and tax depreciation is calculated under TSM and
results in an amount of deferred taxes. Deferred taxes are deducted from
26 the rate base under TSM.

1 An allowance for funds used during construction (AFUDC) is included
2 in TSM based on the yearly balance of construction work in progress (CWIP).
3 When a portion of CWIP is transferred to carrier property, the AFUDC
4 attributable to that portion of CWIP is transferred to the Deferred Return
account and recovered on the same accelerated basis as the other element
of Deferred Return, the annual rate base writeup. Consistent with the rest of
TSM, AFUDC is assumed to be composed of all equity funds.

5 Rates under TSM are calculated based on estimates of the various
6 components of revenue requirement. If those estimates are incorrect and
7 more or less than the actual revenue needed is collected during the year,
8 that over or under collection is carried over to the next year and reduces or
increases the following year's rates. This mechanism assures both shippers
and carriers that the carriers collect neither more nor less than the exact
amount needed to operate TAPS and to provide the TAPS Carriers with the
return specified in TSM.

9 (Footnotes omitted.)

10 ENDNOTE 4 WILLIAMS' PROPOSED MANAGEMENT FEE

11 Williams' testimony is confusing. On the one hand, Williams asserts that the
12 appropriate rate base for determining rates is the TSM rate base,⁷⁰³ which consists of
13 "original" rate base plus "new" rate base, including deferred return.⁷⁰⁴ The TSM rate
14 base on which TSM return may be earned was \$284 million at year-end 1996. In 1997
that rate base consists of over \$284 million.⁷⁰⁵ Williams provides little rationale beyond
that of the Carriers for why TSM produces just and reasonable rates and should
therefore be retained.

15 On the other hand, Williams also asserts that by 2000 the original rate base is 99
16 percent depreciated and that we should therefore award a management fee.⁷⁰⁶
Williams urges that as much of TSM's framework as possible should be retained but
17 that a management fee should be substituted for the current TSM allowance per barrel
provision.⁷⁰⁷ Williams' proposal⁷⁰⁸ is based on a series of FERC decisions regarding
project financed gas pipelines.

18 The purpose behind a management fee according to Williams is to compensate
19 pipeline owners after their original investment is fully depreciated.⁷⁰⁹ Based on the
FERC line of cases cited above, Williams urges that a management fee of 10 percent of

20 ⁷⁰³Williams Alaska Petroleum Inc.'s Post-hearing Initial Brief at 43-44.

21 ⁷⁰⁴See T-2 (BWF) A-3 to A-6.

22 ⁷⁰⁵31-BWF-E.

23 ⁷⁰⁶KBJ-T (W-1) 28-29.

24 ⁷⁰⁷Tr. 4159-60 (KBJ); KBJ-T (W-1) 30; Tr. 4091-92 (KBJ).

25 ⁷⁰⁸KBJ-T (W-1) 30; Tr. 4091 (KBJ).

26 ⁷⁰⁹Tr. 4092 (KBJ).

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1 the average pre-tax return, i.e. operating income of the pipeline over its proceeding life,
2 should be awarded for TAPS beginning 1997.⁷¹⁰

3 In response to Williams' argument, we note first that the analysis concluded in
4 Part IV demonstrates that the TAPS is far from being fully depreciated; the year-end
5 1996 rate base on which return may be earned consists of \$669 million.⁷¹¹
6 Furthermore, new rate base is continually being added to TAPS.⁷¹²

7 Even if rate base were fully depreciated, a parallel line of FERC cases calls into
8 question the logic of providing a management fee once rate base is fully depreciated. In
9 *High Island Offshore System*, the FERC explained, "although the Commission has
10 accepted proposals to impose a management fee, HIOS's proposal results in a
11 substantial rate of return level that must be explored at the hearing to determine
12 appropriateness."⁷¹³ Further, Commissioner Langdon dissented, stating

13 I would vote to reject HIOS' management fee proposal as being contrary to
14 established Commission policy. When a pipeline is fully depreciated, it has
15 been paid for, and there is no logical reason for a company to receive "in
16 lieu" payments for its fully recovered return on equity. Shareholders who
17 provided the equity for the pipeline have been fully repaid for their
18 investment. Period.

19 Adoption of a management fee would require the Commission to depart
20 significantly from its historic view of depreciation. While, on the surface, the
21 fee is derived from a formula based on the cost of the pipeline, down deep,
22 its adoption is a recognition that we have to pay companies to stay in
23 business. Until the Commission formally eliminates its cost-based form of
24 regulation over monopoly pipelines, I view such hybrids as the management
25 fee proposed here to be unjust and unreasonable.⁷¹⁴

26 AS 42.06 requires that Alaska's intrastate rates be just and reasonable. To be
just and reasonable, rates should be cost based and, if not, a specific public policy
rational should be provided. Commissioner Langdon's dissent raises serious question
as to whether the management fee as proposed by Williams would be cost based and, if
it is not, whether a policy rationale could exist that would support it.

In *Stingray*, the FERC explained that although it had provided Stingray the
opportunity to argue for the inclusion of a management fee, the burden of proving the
need for a management fee was upon Stingray.⁷¹⁵ Further, the FERC explained,

⁷¹⁰Tr. 4092-93 (KBJ).

⁷¹¹Exhibit 29.

⁷¹²See Part IV, B.1, *supra*.

⁷¹³*High Island Offshore Sys.*, 57 F.E.R.C. ¶ 61,420, 62,372 (1991).

⁷¹⁴*Id.* at 62, 374.

⁷¹⁵*Stingray Pipeline Co.*, 98 F.E.R.C. ¶ 63,004, 65,023 (2002).

1 . . . in order to demonstrate a need for the management fee over and above
2 the substantial allotments for depreciation, return and associated taxes, a
3 company (especially one not fully depreciated) would need to show
significant detrimental financial circumstances, through no fault of its own,
inhibiting the company's ability to manage its operations.⁷¹⁶

4 Williams has made no such showing. Further, the rate base for TAPS is not fully
5 depreciated and new rate base is being added.⁷¹⁷ Therefore, we do not adopt Williams'
proposed management fee for TAPS.

6
7 ENDNOTE 5 BURDEN OF PROOF

8 The Carriers have repeatedly suggested that they do not carry the burden of
9 proof.⁷¹⁸ We have therefore repeatedly instructed the Carriers that they carry the
burden of proving that 1997-2000 rates are just and reasonable.⁷¹⁹ In *Cook Inlet Pipe*
10 *Line*, the Alaska Supreme Court held that an uncontested settlement does not establish
the rates are reasonable.⁷²⁰ The Alaska Supreme Court relied on the United States
11 Court of Appeals for the District of Columbia decision that involved TAPS⁷²¹ and a
FERC decision involving TAPS,⁷²² noting that the "justness of rates cannot be implied
12 from an approved settlement" because the settlement rates were never adjudicated to
be just and reasonable.⁷²³ In Order 50 in this docket, the APUC carefully acknowledged
13 the Carrier position regarding the standard for determining if rates just and reasonable
and rejected it.

14 The TAPS Carriers stated that the Commission has determined that in
the absence of a protest by an interested party, rates calculated consistently
15 with TSM should be accepted and allowed to become final rates, citing 3
AAC 48.090(d), Order P-86-2(41) at pp. 20-21, Order P-86-2(14) at pp. 3-4.
16 The provisions of 3 AAC 48.090(d) addresses the withdrawal of
applications/petitions, the termination of Commission proceedings prior to full

17 ⁷¹⁶*Id.*

18 ⁷¹⁷Exhibit 42, line 2.

19 ⁷¹⁸*Initial Post-hearing Brief of the Indicated TAPS Carriers* at 54; and see
20 *Indicated TAPS Carriers Notice of Pertinent Additional Authority*.

21 ⁷¹⁹*Re Amerada Hess Pipeline Corp.*, Order P-97-4(79) at 3-4 (April 10, 2000);
Prehearing Conference Transcript at 66 (May 5, 1998).

22 ⁷²⁰*Cook Inlet Pipe Line Co. v. Alaska Pub. Util. Comm'n*, 836 P.2d 343, 353
(Alaska, 1992).

23 ⁷²¹*Arctic Slope Reg'l Corp. v. F.E.R.C.*, 832 F.2d 158, 164 n.12 (D.C. Cir., 1987),
cert. denied, 488 U.S. 868 (1988).

24 ⁷²²*Trans-Alaska Pipeline Sys.*, 35 F.E.R.C. P 61,425, 61,983 n.17 (1986).

25 ⁷²³*Cook Inlet Pipe Line Co. v. Alaska Pub. Util. Comm'n*, 836 P.2d 343, 353
(Alaska, 1992).

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1 adjudication, and the amendment of pleadings in the event of changed
2 circumstances. That regulation does not provide any justification for the
3 TAPS Carriers' assertion that TSM should be assumed to produce just and
4 reasonable rates in the absence of a protest.⁷²⁴

5 The APUC further explained,

6 As previously noted, Order P-86-2(14) addressed the TAPS
7 Settlement and the protest filed by an intrastate TAPS shipper (Petro Star)
8 on July 11, 1986. The Commission was required to determine just and
9 reasonable rates for periods after the date of Petro Star's protest. See P-86-
10 2(14) at pp.4-5, *Amerada Hess*, 8 APUC at 169. In that Order the
11 Commission stated:

12 The Commission will first complete its investigation of the
13 acceptability of using TSM to derive present and future rates. . . .
14 If the Commission determines that TSM does not produce just
15 and reasonable results or is otherwise an appropriate
16 methodology to be used in calculation of intrastate TAPS rates,
17 the Commission will proceed to fully adjudicate rates from July
18 11, 1986, forward. With respect to that adjudication, the
19 Commission is free to set just and reasonable rates according to
20 whatever methodology the Commission finds to be appropriate
21 for the regulation of TAPS.

22 Order P-86-2(14), p. 5. That proceeding was subsequently terminated prior
23 to adjudication as to whether TSM produced just and reasonable rates by
24 Petro Star's withdrawal of its protest pursuant to a settlement with the TAPS
25 Carriers (Petro Star Settlement).

26 Order P-86-2(41) accepted the Petro Star and TAPS Settlement and
terminated the rate proceeding. Contrary to the TAPS Carriers' assertion,
that Order did not state that rates calculated in accordance with TSM would
be accepted as final rates in the absence of a protest. Instead the
Commission reserved the right to review TSM rates for justness and
reasonableness, stating:

Each new rate filed by the TAPS Carriers under the
[TAPS Settlement] is considered to be a revised tariff filing under
AS 42.06.400. The filing is subject to the same standards and
procedures to which it would have been subject if the [TAPS
Settlement] had not been accepted. However, in the absence of
a protest, the TAPS Carriers need not file the supporting material
required by 3 AAC 48.275(a). Instead, the TAPS Carriers should
file the TSM computer disk used in calculating the rate filed and
a hard-copy printout of the rate calculation.

⁷²⁴*Re Exxon Valdez Litigation and Settlement Costs*, Order P-94-1(63)/P-95-
1(43)/P-97-4(50)/P-97-6(29)/P-97-7(30) at 18 (May 27, 1999).

Order P-86-2(41), p. 21.

The TAPS Carriers' misconception regarding the Commission's ability to investigate TAPS rates may be based on the statement that the TAPS Carriers would not have to file supporting documentation typically required for rate revisions in the absence of a protest. The waiver of a revenue requirement filing indicates the Commission's willingness to waive the burdensome requirement of an annual showing of just and reasonable rates, but is not indicative of Commission intent to render itself unable to investigate TAPS rates in the absence of a protest. Such an interpretation of the Commission's language in Order P-86-2(41) is irrational and would require the Commission to abdicate its statutory mandate to ensure that rates charged by the TAPS Carriers are just and reasonable.

Tesoro and MAPCO contended that AS 42.06.400(a) authorizes the Commission to investigate the 1999 TAPS rates under its own motion. The pertinent provision of AS 42.06.400 states "[w]hen a tariff filing is made containing an initial or revised rate . . . the commission may, either upon written complaint or upon its own motion, after reasonable notice, conduct a hearing to determine the reasonableness and propriety of the filing." The Commission believes that statute clearly establishes its authority to institute an investigation into the TAPS rates regardless of whether a protest has been filed. The Commission concludes it can and should, under the authority provided by AS 42.06.400, institute an investigation into the 1999 TAPS rates to determine if TSM produces just and reasonable rates.

P-94-1(63)/P-95-1(43)/P-97-4(50)/P-97-6(29)/P-97-7(30), dated May 27, 1999, at 18-21. (Footnotes omitted.)

The record in this docket clearly reflects that the 1997-2000 rates were suspended before they came into effect. The APUC suspended the 1997 and 1999 rates based on Tesoro's protest and suspended the 1998 and 2000 rates on its own motion.⁷²⁵ Because the 1997-2000 rates are suspended and have never been final rates, the burden lies with the Carriers to prove that each annual rate is just and reasonable.

ENDNOTE 6 THE RULE AGAINST RETROACTIVE RATEMAKING

The general statement of the rule against retroactive ratemaking is "that when determining each of the terms of the revenue requirement formula, when calculating the amount of the revenue to be collected under proposed rates, or when allocating rates between or within a class, the commission cannot adjust for past losses or gains to

⁷²⁵*Re Amerada Hess Pipeline Corp.*, Order P-86-2(61)/P-92-2(30)/P-94-1(36)/P-95-1(16)/P-97-4(1)/P-97-5(1)/ P-97-6(1)/P-97-7(1), dated June 27, 1997; *Re Exxon Valdez Litigation and Settlement Costs*, Order P-94-1(46)/P-95-1(26)/P-97-4(12)/P-97-6(11)/P-97-7(11)/P-97-9(5), dated December 26, 1997; *Re Exxon Valdez Litigation and Settlement Costs*, Order P-94-1(54)/P-95-1(33)/P-97-4(35)/P-97-6(20)/P-97-7(21) dated December 28, 1988; *Re Exxon Valdez Litigation and Settlement Costs* Order P-94-1(75)/P-97-4(64)/P-97-6(41)/P-97-7(46), dated December 20, 1999.

1 either the utility, consumers, or particular classes of consumers.”⁷²⁶ The rule against
2 retroactive ratemaking thus precludes adjusting future rates based on commission
review of past recovery.

3 Because of this doctrine we do not conduct an unrecovered investment analysis
4 which requires looking at past collections to judge current rates. Instead, we follow the
instructions of *Kenai*⁷²⁷ and look to the past *opportunity* of the Carriers to collect. Doing
5 so does not violate the rule against retroactive ratemaking because we rely on past
opportunity to recover. We do not run afoul of the doctrine of retroactive rate making
because the rates that we set in this order do not reflect past gains or losses.

6 Looking backward at past opportunity to recover is not prohibited. The rule
7 against retroactive ratemaking was not intended to prevent commissions from looking
backward. The use of a historical test year by its very nature requires examination of
8 the past experience of the company. Even the use of a future test year generally
involves consideration of historical data adjusted for a future period. Accordingly, the
9 rule against retroactive ratemaking does not bar examination of the past experience of a
company.

10 The rule against retroactive ratemaking is often not strictly applied.⁷²⁸ It can also
11 be overcome by notice to the parties that approved rates are subject to retroactive
alteration. The U.S. Supreme Court has upheld such a notice procedure.⁷²⁹ The APUC
12 gave notice to the Carriers when it accepted the Intrastate Settlement Agreement
subject to the caveat that the rights of future shippers would not be infringed and that
13 any determination of just and reasonable rates in the future would be subject to the
same standards and procedures as if TSM had not been accepted.⁷³⁰ In light of this

14 ⁷²⁶Stefan H. Kreiger, *The Ghost of Regulation Past: Current Application of the*
Rule Against Retroactive Ratemaking in Public Utility Proceedings, 4 ILL. L.REV. 983,
15 997 (1991) cited by the Alaska Supreme Court in *Matanuska Electric Association, Inc. v.*
Chugach Electric Association, Inc., S-9839, No. 5611, August 23, 2002.

16 ⁷²⁷*Re Kenai Pipe Line Co.*, 12 APUC 425, 1992 WL 696192 (Alaska P.U.C.,
17 1992).

18 ⁷²⁸See Kreiger, *supra* note 718, at 999-1002, 1030-31. For example, the Florida
Public Service Commission approved an equipment depreciation increase for a utility
19 that adversely affected the amount of refunds. *Citizens of the State v. Florida Pub.*
Serv. Comm’n, 415 So.2d 1268 (Fla. 1982) On appeal, the Public Counsel argued that
20 the depreciation represcription was not merely a bookkeeping entry but a retroactive
change in rate base. The court rejected the argument, holding that the commission
21 “was not (engaged in) rate-making but, rather considering depreciation represcription.
We acknowledge, as did the commission, that new depreciation allowance does have
22 an effect on the stipulation and refund.” The commission determined, however, that a
depreciation represcription was a factor that all parties should have known would affect
the refund.

23 ⁷²⁹See *Great N. Ry. v. Sunburst Oil & Ref. Co.*, 287 U.S. 358, 361-63 (1932).
24 The state supreme court in a previous decision had held that shipper could challenge
previously approved rates and recover retroactively excess charges because a notice of
25 the possibility of recalculation was in the tariff.

1 notice, the Carriers do not now have a legitimate reliance on Settlement rates. A
2 reliance rationale is relevant only when the party invoking it has rational and legitimate
3 expectations that the past rates will remain in effect for purposes of determining future
4 rates.⁷³¹ The APUC decision accepting TSM subject to the possibility of future
5 challenges⁷³² combined with our suspension of 1997-2000 rates⁷³³ clearly precludes
6 the Carriers from such a reliance.

7 Therefore, although a strict interpretation of the rule against retroactive
8 ratemaking might preclude adjusting future rates based on past revenues, the facts of
9 this case, i.e., prior notice, rate suspension, and use of recovery opportunity rather than
10 post collections to determine whether filed rates are just and reasonable insure that our
11 findings do not violate the rule against retroactive ratemaking.

12
13 ENDNOTE 7 CARRIER ALLEGATION THAT AN INTERSTATE SHIPPER MAY FILE
14 AN INTERSTATE COMMERCE ACT SECTION 13(4) CLAIM WITH THE FEDERAL
15 ENERGY REGULATORY COMMISSION

16 Carriers' assert that "if Tesoro were successful in the short run in lowering
17 intrastate rates, the net result [under TSM] would be immediate, offsetting increase in
18 interstate rates."⁷³⁴ This is based on the provision of the TAPS Settlement that provides
19 "if the Intrastate revenues are reduced, the interstate rates will be based on a larger
20 Total Revenue Requirement and will therefore be higher than they otherwise would
21 be."⁷³⁵

22 (. . . continued)

23 ⁷³⁰*Re Amerada Hess Pipeline Corp.*, 13 APUC 448 (1993). The APUC stated in
24 its October 29, 1993, order accepting the Settlement "Each new rate . . . is subject to
25 the same standards and procedures to which it would have been subject if the Intrastate
26 Settlement Agreement had not been accepted." *Id.*, at 456. This finding has been
reiterated often during the history of this case. The APUC was quite clear at a May 5,
1995, prehearing conference when it stated "The Commission wishes to make it clear
that the TAPS Carriers are the ones who need to justify their rates as though TSM had
not been approved." Prehearing Conference Transcript at 66 (May 5, 1998)].

⁷³¹Kreiger, *supra* note 718, at 1041.

⁷³²*Re Amerada Hess Pipeline Corp.*, 13 APUC 448, 456 (1993).

⁷³³724A *Re Amerada Hess Pipeline Corp.*, Order P-86-2(61)/P-92-2(30)/P-94-
1(36)/P-95-1(16)/P-97-4(1)/P-97-5(1)/P-97-6(1)/P-97-7(1), dated June 27, 1997; *Re*
Exxon Valdez Litigation and Settlement Costs, Order P-94-1(46)/P-95-1(26)/P-97-
4(12)/P-97-6(11)/P-97-7(11)/P97-9(5), dated December 26, 1997; *Re Exxon Valdez*
Litigation and Settlement Costs, Order P-94-1(54)/P-95-1(33)/P-97-4(35)/P-97-6(20)/P-
97-7(21) dated December 28, 1988; *Re Exxon Valdez Litigation and Settlement Costs*
Order P-94-1(75)/P-97-4(64)/P-97-6(41)/P-97-7(46), dated December 20, 1999; *Re*
Amerada Hess Pipeline Corp., Order P-94-1(101)/P-97-4(105)/P-97-6(66)/P-97-7(72),
dated December 29, 2000; *Re Amerada Hess Pipeline Corp.*, Order P-94-1(111)/P-97-
4(144)/P-97-6(78)/P-97-7(103), dated December 20, 2001.

⁷³⁴*TAPS Carriers' Motion to Terminate Investigation* at 20.

⁷³⁵*Id.* at 5 n.8.