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101. The Carriers posit varied arguments claiming that the Stipulation and Form 6[71] should be used in the Opinion 154-B presentation.[72] It is noted that the Carriers' claim that the Stipulation remains in place as to non-settling parties is baseless. First, the terms of the TSA rendered the Stipulation invalid.[73] The Stipulation is inconsistent with the TSA as it uses straight-line depreciation while the TSA uses accelerated depreciation.[74] Second, Anadarko/Tesoro's statement that "there is no realistic way for the 1982 Depreciation Stipulation and the Interstate Settlement to 'remain in effect simultaneously'" since no shipper is a signatory to the TSA is also a persuasive conclusion. A/T RB at 36. The Commission has previously held that the books of the regulated entities do not control in setting rates.[75] The evidence in this case reflects that the Carriers maintain four sets of books (Tax, GAAP, FERC reporting and FERC ratemaking for TAPS). Ex. A/T-229 at E-14000186. Moreover, the reporting books record depreciation on a straight line basis and the FERC

"book" depreciation. Thus, there is a contradiction between the Carriers rate filings and the position they have taken in this proceeding.

[71] The record demonstrates that the Carriers' Form 6 have not been maintained in a manner consistent with the 1982 Stipulation. Anadarko/Tesoro witness Sullivan testified on the multiple deficiencies in the quality of the data being reported to the Commission. Tr. at 5402.

[72] Internal reports and communications of the Carriers dating to 1998 contradict the Carriers current position. See Ex. A/T192 (graphs illustrating the front-end loading of the depreciation as amounts recovered thru tariffs); Ex. A/T-186 (memorandum explaining accelerated return on capital which caused a timing difference with book accounting); Ex. A/T-188 (memorandum responding to "profit" the depreciation allowance embedded in the revenues is greater than that reflected on the financial records). Other memos confirm that the Carriers may be motivated to have the highest rate possible to decrease the combined government income (taxes and royalties). Ex. A/T-187. The Carriers front-end loading of depreciation saved the owners of TAPS approximately $1.5 billion in windfall profits taxes. Ex. A/T-184.

[73] *See* A/T-190 at Section III-5 (p. 26) ("Any stipulation or agreement previously entered into in the TAPS proceeding by the parties to this Agreement shall continue to be, to the extent not inconsistent with the Agreement, in full force and effect between the parties to this Agreement."); Staff RB at 29.

[74] The accumulated depreciation exceeds the accumulated "booked" depreciation by approximately $1.7 billion. Ex. ATC-266. In comments opposing the TSA, Sohio illustrated that the TSM depreciation exceeds straight line depreciation from 1978-1991. Ex. SOA-57, Attachment B.

[75] *Virginia State Corp. Comm'n v. FERC*, 468 F. 3d 845, 847 (D.C. Cir 2006); *Williston Basin*, 55 FERC at 62,008, 56 FERC at 61,370 .

ratemaking books record depreciation on an accelerated basis pursuant to TSM.[76] Finally, Anadarko/Tesoro's and Staff's other arguments are similarly persuasive.[77] To apply the balances suggested by the Carriers would result in double recovery and an artificially inflated rate base by over $481 million.[78] Ex. A/T-143 at 20, Illus. 8. Thus, it is the amount of accumulated depreciation contained in the Carriers annual rate filings that will be plugged into the Opinion 154-B methodology. Ex. A/T-144, WP2 at 5:7; Ex. A/T -146, WP2 at 4:7.

Issue III.B.2. Are the Carriers entitled to an adjustment to rate base for deferred returns, and if so, what is the appropriate amount?

102. The Carriers claim that the deferred return amount used by Anadarko/Tesoro is not appropriate because it results in a low deferred return balance. The Carriers claim that the TSM deferred return is not consistent with Opinion 154-B deferred return. First, the Carriers state that Anadarko/Tesoro use the incorrect amortization schedule. According to the Carriers, *Lakehead Pipeline Company*, 71 FERC ¶ 61,338 (1995), *reh'g denied*, 75 FERC ¶ 61,181 at 61,591(1996) (*Lakehead*), requires the deferral to be capitalized and recovered through amortization charges (or trended) under Opinion 154-B for all years after 1983. The Carriers state that TSM uses the stipulated depreciation factors in TSA Exhibit F to amortize the deferred balance while the appropriate depreciation schedule for Opinion 154-B is set forth in the Stipulation. Second, the Carriers claim that under the TSM, both the TSM Depreciation and the recovery of TSM Deferred Return are subtracted from the rate base before applying the inflation factor thereby reducing the amount of TSM Deferred Return to be recovered in later years. In addition, the Carriers contend that the TSM carrier

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[76] The accelerated depreciation was established by the TSA which provided a "small upfront refund obligation." Ex. A/T -229 at 14000185.

[77] *See* A/T RB at 33-42; Staff RB at 30-42. The Carriers arguments concerning the Form 73 orders also fails because as witness Sullivan confirmed, those orders only required oil pipelines to begin submitting depreciation data in magnetic tape form. A/T RB at 39; Staff RB at 32 (citing Tr. at 5569-70, 5574-75, 5578 (Sullivan)). The Form 73 orders were not about ratemaking, so as Staff again clarifies, the orders did not change or address how ratemaking is affected when actual depreciation recoveries differ from book accounting depreciation. *Id.*[77] Moreover, the Carriers' position in the case at bar is contrary to their previous position regarding revisions to Sheet 700 of FERC Form 6 reports. They asserted in the cited proceeding that the most relevant information is the TSA supporting information provided to the Commission each year in annual tariff filings. Ex. A/T-191 at 4-5.

[78] A/T RB at 36 (citing Ex. A/T-143 at 20, Illus. 8 showing that to get to the Carriers' Opinion 154-B rate base accelerated depreciation has to be added back in).

property base to which TSM deferred return is applied, excluded $450 million excluded for settlement purposes.

103. Anadarko/Tesoro state that they will accept the deferred returns balances, and related amortization amounts contained in the Carriers' 2005 and 2006 rate filings ($175 million for 2006).[79] Although Anadarko/Tesoro have accepted these amounts, they still believe the amounts are excessive. Staff also agrees that Anadarko/Tesoro have used the correct amounts. Staff states that the amount of deferred returns included in rate base should also reflect the amounts previously amortized on an accelerated basis and collected in the Carriers' rates from 1977 forward. Staff also contends that the balances the Carriers use their Opinion 154-B presentation are grossly overstated. Last, Staff states that if any deferred returns are to be included in rate base, the amounts proposed by Anadarko/Tesoro are the appropriate amounts to use.

104. However, Anadarko/Tesoro assert that they do not agree with the Carriers' restatement of their deferred returns balance to more than $1 billion in the Carriers' Opinion 154-B proxy. Anadarko/Tesoro contend that the Carriers' balance for deferred returns is inappropriate because the Carriers' witness Mr. Van Hoecke: (1) calculates deferred earnings based on a portion of the $450 million that has already been fully recovered; (2) retroactively inflates property balances by restating the Carriers' recovery of investment from an accelerated to a straight-line basis; (3) retroactively inflates AFUDC by recalculating the Carriers' actual balances with backcasted equity-rich capital structures and through inflated and uniform equity rates of return (as high as 22%); (4) inflates deferred earnings by including deferred earnings on the unamortized balance of unauthorized starting rate base; and (5) inflates deferred earnings by amortizing the deferred earnings balance on a straight-line basis ignoring that the Carriers have already recovered deferred earnings on an accelerated basis.[80]

Discussion/Findings

105. Staff correctly points out that deferred return is a ratemaking concept used in a TOC methodology in Opinion 154-B. Under TOC the inflation portion of the rate of return on equity is extracted, leaving a real rate of return. The real rate of return is

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[79] Anadarko/Tesoro claim that there is evidence in the record that would support FERC's decision to eliminate the deferred return balance from the rate base. According to Anadarko/Tesoro, Exhibit A/T-261 illustrates that there was no return deferred and that the Carriers have overcollected at least $8 billion from shippers. A/T IB at 59 n.50 (citing Tr. at 6032-6035).

[80] A/T IB at 61-62.

applied to the pipeline's equity share of rate base to determine the yearly allowed equity return in dollars. The dollars related to the inflation portion of the equity return, are "deferred" for recovery in future rates. In future rates the deferred amounts are added to rate base as an equity rate base "write-up" (the equity portion of rate base is "trended" up), and amortized as an expense like depreciation over the useful life of the pipeline.[81]

106. Staff's reasoning is correct and falls in line with the conclusions reached above.[82] The Carriers' arguments concerning the differences between the TSM deferred returns and Opinion 154-B returns has no decisional impact *vis a vis* the amounts collected in the Carriers' rates over the years. *See id.* It is irrelevant that the TSM calculations of deferred returns is inconsistent with Opinion 154-B calculations and the Commission's pronouncements implementing Opinion 154-B in *Lakehead.*[83] Mr. Van Hoecke's (Carriers witness) approach (adding anew the deferred earnings) results in double recovery and is rejected.

107. Staff and Anadarko/Tesoro are correct that the deferred return amounts have already been collected via the TSM through the Carriers' use of a 100% equity structure[84] and APB.[85] The TSM acted much like TOC, deferring a specified amount of return dollars from early years to later years. The accelerated depreciation schedule and the plant balances are stated in the TSM formula and in the Carriers rate fillings, the accelerated recovery of deferred return and the specific TSM deferred return balances and annual deferred return expenses were included in the Carriers 2005 and 2006 rate filings.[86] The Carriers have already recovered the deferred return element; however, as Staff notes, "to be true to the approach, we must take the state of the ratemaking record as we find it." *See* Staff IB at 53, A/T IB at 60.

108. The Carriers argue that *Lakehead* and other Commission pronouncements require pipelines that existed prior to Opinion 154-B to begin the calculation of

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[81] *Opinion 154-B*, 31 FERC, *supra,* at 61,834-35; Staff IB at 51-52.

[82] Staff RB at 36.

[83] *See* A/T RB at 45.

[84] *See* Staff IB at 53; ATC-14, Sections II-6 (p. 15), II-7 (p.17), II-8 (p.18) (stating that the amounts are to be included in the TRR); Ex. A/T 3 at 39-40 (Brown); Ex. A/T-79 at 23 (Sullivan).

[85] *See* Staff IB at 53; Ex. A/T-3 at 39-41 (Brown); Ex. A/T-79 at 23 (Sullivan).

[86] ATC-84, Sheet E, line 121 at 34, 40, 46, 52; Toof, Tr. 5101-02; Grasso, Tr. 5985-86.828, 836, 839-40, 853-56; Brown, Tr. 4679-8.

deferred return with the pipelines' rate base beginning December 31, 1983.[87] Staff agrees that in *Lakehead* the Commission determined that in transitioning from a valuation to a cost-based TOC, the appropriate starting rate base under the TOC methodology is the balance as of the date Opinion 154-B became effective (December 31, 1983). Staff IB at 55. However, Staff effectively refutes the Carriers' argument that the correct deferred return balance must be calculated in accordance with the Carriers' Opinion 154-B proxy. *Id.*[88] As a matter of fact, citing SFPP[89] Staff correctly argues that the Carriers cannot backcast and recreate rates. The holding in SFPP is right on point, when setting a cost based rate for the future there is no need to allow an additional adjustment for inflation already recognized and collected in rates.[90]

109. Staff states that Lakehead's rates were charged under the valuation methodology and did not include a deferred return cost component. *Id.* Additionally, Staff aptly notes that in this case, the deferred balances and annual deferred costs are known and reflected in the Carriers' TSM filings. *Id.* Staff's arguments are persuasive, and as discussed above, the appropriate amounts to use are those that reflect what the Carriers' have actually collected in rates. Those amounts are

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[87] Carriers' IB at 56; *Lakehead*, 75 FERC at 61,591.

[88] Evidence in this case indicates that the Carriers have collected approximately $6.6 billion in deferred earnings. Ex. A/T-44 & ATC-23, Sum Ln. 121, Amortization of Differed Returns, minus Ln. 7, Accumulated Amount of AFUDC; Ex. A/T-145, Stmt. E.

[89] *SFPP supra*, 117 FERC at 12-16.

[90] Anadarko/Tesoro and Staff explain that it could be concluded that there should be no allowance for deferred return from prior periods due to the TSM. Witnesses Brown and Sullivan (A/T) testified that TSM calculated deferred returns on remaining investment using 100% equity structure. This assumes incorrectly that the pipeline was constructed with only equity, overstates the deferred return, and violated the principle of Opinion 154-B that deferred returns are not allowed on debt-financed rate base. Ex. A/T-3 at 39-41. Additionally, after 1989, TSM allowed a larger nominal return known as Allowance Per Barrel (APB) adjusted for inflation yearly back to 1983. ATC-14, §II-7(b); Ex. A/T 3 at 40; Ex. A/T-79 at 23; Tr. 38 at 5924-26; Ex. A/T-180 at 13. (Horst described APB as allowing the Carriers to earn a profit as long as ANS was transported. Id. at 14. The APB charge was originally $0.35 in 1989 and now is $1.19 in 2006. In conclusion, both Staff and Anadarko and Tesoro assert that the TSM overstated deferred return and after 1989 inflation for return purposes has been more than recovered in TSM. However, since Anadarko and Tesoro accept the amounts in the Carriers' rate filings this point is made for illustrative purposes only.

contained in the Carriers' TSM filings. The Carriers' attempt to use the amount of their deferred returns reflected in Form 6 is therefore rejected Carriers' RB at 45. The Carriers' claims that the TSM item labeled "deferred ret[illegible]" cannot be considered "actual return" is accordingly rejected.[91]

110. Thus, the appropriate adjustment and amounts for deferred returns are reflected in Anadarko/Tesoro's Opinon-154-B cost-of-service presentation. The amount of deferred return in 2005 is $198.31 (in millions). Ex. A/T-144, WP2 at 5:18 (Col. "2004"). The amount for 2006 is $175.283 (in millions) A/T 146, WP2 at 4:18 (Col. "2005").

Issue III.B.3. What is the appropriate amount of AFUDC?

111. The Carriers contend that Mr. Van Hoecke's Allowance for Funds Used During Construction (AFUDC) balances must be used for Opinion 154-B. According to the Carriers, Mr. Van Hoecke calculated the AFUDC in accordance with the Commission's oil pipeline cost of service regulations set forth in 18 C.F.R. § 346.2(c)(6) (2006). The Carriers state that Anadarko/Tesoro have incorrectly extracted the amounts in the Carriers TSM submissions and, in addition, did not follow the Commission's regulations. However, the Carriers do not recognize that this issue is purely derivative of other issues.[92]

112. Anadarko/Tesoro and Staff state that the appropriate balance for AFUDC to be included in rate base is the amount reported in the Carriers' annual rate filings. Anadarko/Tesoro state that the AFUDC amounts included in the Carriers' rate base for the period 1977 through 1983 are shown in TSM-6. All subsequent years are shown in the Carriers' annual rate filings, Anadarko/Tesoro contend.[93] Anadarko/Tesoro and Staff also state that these balances reflect the amounts that have

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[91] The Carriers state that contention is based on the same arguments in Section III.A. which basically claims that third parties cannot rely on TSM elements which are an inseparable settlement package. In addition, the Carriers' arguments concerning Staff's and Anadarko/Tesoro's statements that the Carriers' over collected deferred return and this component could be eliminated from the Opinion 154-B calculation is not addressed (along with the Carriers' retroactive ratemaking arguments) since Anadarko/Tesoro and Staff have agreed to accept the Carriers' balances which includes deferred return.

[92] Carriers RB at 47.

[93] Anadarko/Tesoro state that the AFUDC balances are calculated consistently with the principles in Opinion 154-B, but are for a different period because they pre-date Opinion 154-B. A/T IB at 63.

already been collected by the Carriers. In addition, Anadarko/Tesoro state that the deferred balance has been amortized from 1977 through 2005.

113. Staff states that AFUDC is also included in rate base and recovered in basically the same manner as the property balances discussed in Issue III.B.1. Staff IB at 56. Thus, Staff asserts, the amount used for AFUDC must be consistent with the property balance issue. Staff also claims that AFUDC was one of the rate elements whose recovery was accelerated under the TSA in order to allow the Carriers to avoid making any refunds for the 1977 thorough 1981 period and limited refunds for the 1982 through 1985 period. The Carriers' balances for AFUDC are inappropriate, Anadarko/Tesoro and Staff assert, because the Carriers ignore the AFUDC that has been included in the Carriers' rates and instead, recalculate it. Thus, using the Carriers' amounts would result in double recovery, Anadarko/Tesoro and Staff contend.

Discussion/Findings

114. As Staff explains, AFUDC "is a method of deferring, in a capital account, costs associated with plants under construction for inclusion in a utility's rate base once the plant is put into service." Staff IB at 56 (citing *Kentucky Utilities Co. v. FERC*, 760 F.2d 1321, 1323 (D.C. Cir. 1985)). The amounts used by Anadarko/Tesoro reflect the amount of AFUDC actually collected by the Carriers. A/T-3 at 31 (Brown); Tr. 5930,5954-55, 5983 (Grasso); Tr. 5824-25 (Grasso). Thus, the appropriate amounts of AFUDC to include in rate base are listed in Exhibits A/T -144 Stmt. F (2005), A/T-146, Stmt F (2006).

Issue III.B.4. What is the appropriate amount of ADIT?

115. The Carriers state that the only issue with regard to Accumulated Deferred Income Tax (ADIT) is the appropriate input for past depreciation expense. The Carriers claim that Mr. Van Hoecke has correctly used the depreciation expense balances recorded in the Form 6 annual reports pursuant to the Stipulation. TSM derived depreciation should not be used, the Carriers assert.

116. Anadarko/Tesoro contend that the appropriate balance for ADIT is reflected in the Carriers' annual rate filings. The Carriers' Opinion 154-B presentation, Anadarko/Tesoro assert, ignores the ADIT that has been included in the rate filings, and instead, recalculates the amount. Anadarko/Tesoro claim that the Carriers have added $183.11 million to their Opinion 154-B rate base in 2006 for items including ADIT. A/T IB at 65 (citing Ex. A/T-78 at 55; Ex. A/T-143 at 20 Illus. 8). According to Anadarko/Tesoro, this additional amount is the derivative result of the impact on ADIT, AFUDC, and working capital when the Carriers' Opinion 154-B recalculates and adds deferred earnings, a starting rate base adjustment, and then ignores the

accelerated portion of the depreciation to the Carriers' filed rate base. Staff states that ADIT is a mechanically calculated number that partially derives from the deferred earnings, depreciation, and other rate base assumptions used to calculate the rates. Staff IB at 57 (citing A/T-78 at 55). Thus, Staff asserts, once these issues are resolved ADIT can be determined.

Discussion/Findings

117. The parties seem to agree that the resolution of the issue concerning the appropriate depreciation expense will determine the outcome of this issue. ADIT arises because "certain deductions from income are recognized by the IRS for tax purposes before they are recognized for book or rate purposes. The effect of the earlier recognition of deductions for tax purposes is that ratepayers will provide the pipeline with revenues to cover taxes which will not actually be paid until some time in the future." Staff IB at 57. In addition, Staff states that "ADIT is the cumulative amount of such revenues which have been supplied by ratepayers but not yet paid out in taxes by the pipeline, and Commission practice requires this prepaid expense to be deducted from rate base." Staff IB (citing *Trans Alaska Pipeline Sys.*, 10 FERC ¶ 63,026 at 65,218 (1980); Opinion 154-B, 31 FERC at 61,837 n.55).

118. Based on the determinations in this decision it is found that the appropriate amounts of ADIT are reflected in the Carriers annual rate filings as stated by Anadarko/Tesoro and Staff. Thus, the amount of ADIT for 2005 is $46.20 (in millions). A/T IB at 64; Ex. A/T-144, Stmt. E, ln. 11. The amount for 2006 is $43.00 (in millions). A/T IB at 64; A/T-146, Stmt. E, ln. 11.

Issue III.B.5. Are the Carriers entitled to a starting rate base write-up, and if so what is the appropriate amount?

119. The Carriers claim that Opinion 154-B presumed that all oil pipelines in existence as of the date of the opinion (June 28, 1985) would be allowed the starting rate base (SRB) write-up. Thus, the Carriers contend, the burden is on the challenging party to show why the SRB write-up should not be permitted in a particular case. Carriers' IB at 61 (citing *Lakehead*, 71 FERC at 62,311). The Carriers state that the portion of the SRB that exceeds the Carriers' depreciated original cost rate is referred to as the SRB write-up. Mr. Van Hoecke, the Carriers assert, correctly calculated the SRB using the Cost of Reproduction New (CRN) calculated by Mr. Ganz.

120. Flint Hills claims that a total of $322.52 million or $.99 per barrel needs to be added to the SRB. This consists of two components which Flint Hills claims are an inclusion of an SRB amount and a corresponding deferred return back to 1983. Flint Hills also contends that Anadarko/Tesoro's rejection of a SRB write up is meritless.

Flint Hills posits arguments similar to the Carriers' which, for the most part, state that without the TSA, the TAPS rate base would have been calculated using valuation and that prior to the TSM the TAPS rates were filed under the ICC valuation methodology. Alternatively, Flint Hills suggests a transition cost adjustment for the remaining APB as compensation for the loss of the APB if the TSA does not run its course.

121. The Carriers state that Anadarko/Tesoro's arguments that the Carriers are not entitled to a SRB write-up are incorrect. First, the Carriers assert that contrary to Anadarko/Tesoro's assertions, the Carriers relied on the ICC valuation methodology for the entire period from start-up through approval of the TSA. Second, the Carriers claim that they relied on the valuation methodology long after the initial rates were filed. The Carriers claim that they worked with the Commission's Valuation Branch to finalize the valuation reports on TAPS and that they continued to be subject to the Commission's valuation regulations even in late 1984. The Carriers claim that it was not until seven years after the initial TAPS rates were set that it can be fairly said that an oil pipeline should no longer rely on valuation. Third, the Carriers assert that Anadarko/Tesoro's contentions that final TAPS rates were not set under valuation and that a final valuation report was not issued do not rebut the presumption of their entitlement to an SRB write-up. Last, the Carriers claim that inclusion of the SRB write-up does not inflate their Opinion 154-B rate base since, as Mr. Van Hoecke has shown, including the SRB write-up results in a lower rate base figure as of December 31, 1983.

122. Anadarko/Tesoro and Staff argue that the Carriers are not entitled to a SRB write-up because the Carriers are not transitioning from regulation under the valuation methodology. According to Anadarko/Tesoro and Staff, the Commission only intended the SRB to be a transitional rate base for existing pipelines that had assets that were valued under the valuation formula. In fact, they state that Opinion 154-B only allowed a SRB adjustment for assets that were transitioning from valuation to TOC. No valuation order was ever issued for TAPS by the ICC or FERC, Anadarko/Tesoro and Staff claim. Anadarko/Tesoro also assert that every final rate on TAPS for the past 30 years has been based on the TSM and not the valuation methodology. Thus, Anadarko/Tesoro state, they did not include a SRB adjustment in their Opinion 154-B presentation. The Carriers inflate their Opinion 154-B proxy with a SRB adjustment of $421.10 million calculated (backcasted) for 2006, Anadarko/Tesoro and Staff contend. Staff further asserts that neither the TSA nor the TSM mention the valuation methodology. This is relevant Staff states, since from the commencement of TAPS operations to date, the TSA has established the revenue requirements on TAPS.

Discussion/Findings

123. The Carriers are not entitled to a SRB write-up because the Carriers' assets were never valued under the valuation methodology. The Carriers and Staff aptly note that with respect to the SRB write-up, Opinion 154-B left the door open for "a participant in a rate case [to] raise this issue and attempt to prove that a particular company is not entitled to the instant starting rate base."[94] Staff and Anadarko/Tesoro have shown that the Carriers are not entitled to a SRB write-up and, accordingly the Carriers' and Flint Hills' arguments are rejected. Accordingly, it is found that Anadarko and Tesoro have rebutted the Carriers' alleged presumption and thus, the Carriers are not entitled to an SRB write-up.

124. First, the Carriers never relied on valuation. The Commission's language in Opinion 154-B is clear. The SRB write-up was only intended for "existing assets that are currently valued under the valuation formula...." Opinion 154-B, 31 FERC at 61,833. Importantly, the TAPS rates were never calculated under the valuation formula. The Carriers claim that their interim rates were based on valuation. Carriers' IB at 62-64. However, Staff and Anadarko/Tesoro have shown that this argument fails for several reasons. The Carriers' interim rates were not final and subject to refund and when the final rates were set on TAPS, those rates were based on the TSM and not valuation.[95] The Carriers simply never had an approved rate on TAPS under the valuation method. *Id.*; Staff RB at 39. It is also telling that the Commission never issued the Carriers a valuation report.[96] In addition, the Carriers' initial filings were based on different methods.[97]

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[94] Opinion 154-B, 31 FERC at 61,836 (citation omitted); The Carriers argue that *Lakehead Pipe Line Co., L.P.*, stands for the proposition that all oil pipelines are presumptively entitled to a SRB write-up. 71 FERC ¶ 61,338. The Commission noted that Lakehead had used the valuation method "long-term" and this is why the Commission stated that Lakehead was presumptively entitled to a SRB. *Id.* at 62,309. The record here, as discussed below, indicates that the Carriers never used valuation.

[95] A/T IB at 68; RB at 47-48; Staff RB at 39; IB at 59-60; Ex. A/T-79 at 19-20 (Sullivan stated that the Carriers were never regulated under the valuation rate method); Ex. A/T-3 at 35 (Brown stated that "[t]he Carriers' rates from 1977 to date have been calculated under the TSM and accepted under the terms of the Interstate Settlement... the Carriers have never had their rates approved or set by the ICC or by the Commission under the ICC valuation methodology.").

[96] A/T RB at 47; IB at 65; Staff IB at 60; RB at 41; Ex. A/T-79 at 20 (Sullivan); Tr. 2074 (Ganz).

[97] A/T RB at 51; IB at 67 n.55; Tr. 5800-01 (Grasso) (The eight Carriers filed their initial rate filings at the ICC using different rate theories: some were original

125. The Carriers' arguments concerning *Lakehead Pipe Line Co., L.P.*, 75 FERC at 61,591 are flawed. Contrary to the Carriers' assertions, in Opinion 154-B, the Commission specifically stated that it does make a difference which methodology the pipelines' rates were based on. Carriers RB at 47-48. The Commission stated that the SRB adjustment was intended for "existing assets that are *currently valued under the valuation formula*...." Opinion 154-B, 31 FERC at 61,836 (emphasis added). This language precludes pipelines that were not using the valuation method at the time Opinion 154-B was issued from entitlement to a SRB write-up. *See id.*

Issue III.B.6. What is the appropriate amount of other rate base items?

126. The Carriers state that for the reasons listed in section III.B.1 the other rate base items which include land, working capital, and miscellaneous plant adjustments must be based on the Carriers' Form 6 balances. Anadarko/Tesoro claim that there should be no other material rate base items except for the credit to rate base for DR&R collections. Staff states that other rate base items such as land and working capital are derivative of other issues and will follow from rulings on those other issues.

Discussion/Findings

127. The parties recognize that the resolution of this issue is tied to the findings concerning Issue III.B.1. In that section, it was found that the correct inputs are found in the Carriers' annual rate filings. Staff discusses the $450 million exclusion from rate base in this section. It has already been found that the $450 will be excluded from rate base as discussed above. Thus, there are no other material rate base items at issue with the exception of the DR&R rate base credit issue discussed below.

Issue III.B.7. Should asserted DR&R collections and earnings be credited against rate base, and if so, what is the appropriate amount?

128. This issue is discussed in section III.D.

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cost: and some were "original cost filings guised as valuation." Tr. at 5800-5801. The common theme being to file "the highest possible tariff... in order to minimize government income [taxes and royalties] from the field and the pipeline." Ex. A/T-187 at 1. The ICC interim rates were not intended to have permanent effect and were not "prescribed" rates. Ex. A/T-157 at 1, 4, 7. Therefore, it is found that the Carriers interim rates do not support their claims. Consequently, the Carriers SRB calculations are not given any weight.

Issue III.C. What is the appropriate level of operating expenses excluding depreciation and DR&R?

129. Anadarko/Tesoro and Staff state that they accept the Carriers' operating expenses, exclusive of depreciation for 2005 and 2006. Ex. A/T-143 at 5-6, and Illus. 6; Ex. ATC 37-41, Stmt. B (2005); Ex. ATC-90-94, Stmt. B (2006); Carriers IB at 70 n.63. As a result, there is no issue to resolve.

Issue III.D. What is the appropriate depreciation expense?

130. The Carriers argue that the Stipulation is still in effect, and accordingly, the proper amount of depreciation expense is reflected in Form 6. Moreover, the Carriers assert, since they have not proposed to change the approved depreciable life of 2011, that end-life remains in effect. The Carriers contend that if the Commission opts to revise the depreciable life, the Carriers have also produced a depreciation study using an end-life of 2034. These recalculated amounts, the Carriers assert, were plugged into the Opinion 154-B model and also prove that the Carriers' rates are just and reasonable using the 2034 depreciable life. The Carriers claim that Anadarko/Tesoro's depreciation study, done by Mr. Sullivan, is flawed. According to the Carriers, Mr. Sullivan's study is flawed because: (1) the property and accumulated depreciation balances are derived from the TSM and (2) because TSM-derived balances are not broken out by property account, Mr. Sullivan had to allocate TSM amounts arbitrarily based on Form 6.

131. Anadarko/Tesoro state that they have calculated the correct depreciation expense using the Carriers' annual rate filings that reflect the Carriers' previous recovery of investment and a remaining life of 2034. Anadarko/Tesoro claim that all the parties agree that the useful life of TAPS will extend through at least 2034. According to Anadarko/Tesoro, the Carriers' rate position is inconsistent because their Opinion 154-B presentation uses a useful life ending in 2034 while their filed rates use an ending date of 2011. Anadarko/Tesoro contend that the Carriers' depreciation study is flawed because it relies on incorrect plant balances from Form 6 that do not reflect their previous investment and Mr. Spanos failed to adjust for an overaccrual.

132. Anadarko/Tesoro state that contrary to the Carriers arguments, Mr. Sullivan only had to allocate the property balances to individual accounts because the Carriers failed to properly update their depreciation study. The Carriers TSM filings did not break out the overall property balances by account, Anadarko/Tesoro claim, and consequently, the lack of accurate account-by-account balances was caused by the Carriers. Staff states that the appropriate property balances are found in the Carriers'

rate filings. In addition, Staff contends that the Carriers' 2034 depreciation study conducted by Mr. Spanos, should also be used.

Discussion/Findings

133. The parties agree that depreciation expense is calculated using the appropriate net property balance and a reasonable estimate of the remaining useful life of TAPS. Carriers RB at 55; A/T IB at 73; Staff IB at 66; RB at 46. First, the correct plant balances are those proposed by Anadarko/Tesoro as discussed in section III.B.1. The Carriers' depreciation study based on an end-life of 2034 used the Form 6 balances which do not reflect previously recovered amounts.[98] The Carriers take issue with Anadarko/Tesoro's property allocation. Mr. Sullivan properly allocated the correct property balances to individual accounts using the proportions employed by Mr. Spanos. Tr. 5468-71 (Sullivan). Anadarko/Tesoro's study used the balances from the Carriers' TSM filings and the survivor curves used by Mr. Spanos.[99] In addition, Mr. Sullivan corrected for an overaccrual of $147 million which Mr. Spanos admittedly had not done in his own study. Tr. 1741-44 (Spanos); Tr. 5470-71 (Sullivan). Again, Mr. Sullivan's testimony is credible and is accorded substantial weight. Thus, Anadarko/Tesoro's depreciation study will be used since it is based on correct and more reliable data. Second, the correct end-life of TAPS is 2034 as corroborated by several witnesses.[100] Accordingly, it is found that the correct depreciation expense balances are those proposed by Anadarko/Tesoro.[101]

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[98] Tr. 1707, Ex. A/T-141 at 7. The Stipulation is no longer in effect, therefore the Form 6 balances should not be used. *See* Section II.B.1, *supra*.

[99] Staff and the Carriers advocate the use of Spanos's study which includes his survivor curves, as long as it applies the correct property balances. Staff IB at 66; Carriers IB at 70-71; Tr. 5471 (Sullivan).

[100] Ex. A/T-141 at 4 (Sullivan); A/T-79 at 18-19 (Sullivan); ATC-4 at 46 (Kalt); ATC-154 at 4 (Spanos); A/T-32 at 4 (TAPS right-of-way-extended to 2034); Carriers' RB at 56.

[101] The depreciation expense for 2005 is $14.06 (in millions). Ex. A/T-144, Stmt B4, ln. 6. The depreciation factor for 2005 is 3.8095. A/T-142; Tr. at 5745-46 (Grasso describes the calculation of the depreciation factor). The depreciation expense for 2006 is $13.48 (in millions). Ex. A/T-146 Stmt. B4, ln. 6; Ex. A/T-142. Anadarko/Tesoro note that Mr. Grasso agreed that for 2006 it would be appropriate to modify the depreciation factor to reflect one year less of remaining life (from 3.8% to 3.9%). Mr. Grasso verified that the change would increase depreciation expense slightly, but would not impact the overall TAPS rate. A/T IB at 75; Tr. 5988-89.

Issue III.E. What is the appropriate DR&R expense?[102]

134. The Carriers state that the TSA included a negotiated DR&R allowance in the TSM ceiling rates ($2.2 million for 2005 and $2.1 million for 2006). Mr. Van Hoecke did not include any amounts for DR&R when calculating the Opinion 154-B rates, the Carriers assert. However, the Carriers note that in deciding to exclude these amounts, Mr. Van Hoecke did not make a determination as to whether DR&R expenses were necessary or appropriate. The Carriers contend that their filed rates are just and reasonable whether or not they include any amounts for DR&R and, accordingly, they should be able to recover the full amount of their filed rates for 2005 and 2006.

135. Anadarko/Tesoro and Staff argue that there should be no expense allowed for DR&R. The Carriers have failed to support the allowance for DR&R included in their filed rates, Anadarko/Tesoro contend. In addition, Anadarko/Tesoro and Staff assert that the Carriers' Opinion 154-B proxy did not include any DR&R allowance and the Carriers did not provide any evidence related to this issue. Thus, Anadarko/Tesoro and Staff conclude, the Carriers' DR&R allowance should be rejected. Anadarko/Tesoro and Staff contend that the Carriers fail to account for the amounts of DR&R they have already recovered and associated earnings. The Carriers' massive front-loaded recovery of DR&R is well documented in the record, Anadarko/Tesoro claim. Anadarko/Tesoro and Staff also argue that the Carriers' parents used the funds as unrestricted capital and should be required to account for such earnings. Finally, Anadarko/Tesoro claim that the Carriers now have approximately $15 billion more in DR&R funds than they would need to conduct DR&R activities.

136. Anadarko/Tesoro and Staff assert that several key assumptions underlying the DR&R collection schedule have changed and will cause the Carriers collections to grow faster than originally anticipated when the schedule was established. They state that the assumptions changed as follows: (1) the life of TAPS was extended from 2011 to at least 2034; (2) the federal corporate income tax rate changed from 46% to the current 35%; and (3) the IRS allowed the Carriers to deduct an unanticipated $900 million. The Carriers do not dispute these changes, Anadarko/Tesoro and Staff contend. Anadarko/Tesoro and Staff claim that based on applying an average earnings rate (attributable to the parents) the total for DR&R collections and earnings is more than $17.2 billion. When compared to the undisputed DR&R obligation

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[102] This section discusses all DR&R related issues including those addressed in Issue III.B.7 (Should asserted DR&R collections and earnings be credited against rate base, and if so, what is the appropriate amount?) and Issue III.M (Are any other remedies related to DR&R appropriate in this proceeding?).

amount of $2.63 billion proffered by the Carriers, Anadarko/Tesoro and Staff assert, there is clearly no need for further DR&R collections.

137. Staff states that the question here is what earnings assumption accurately reflects the time value of the accelerated collection of the DR&R funds and the unrestricted use of these funds by parents. Anadarko/Tesoro advocate, and Staff endorses, the use of the actual, historic, after-tax earnings rates of the parents. Staff RB at 49; A/T IB at 109. The Carriers claim that the risk-free rate is the proper rate and the rates requested by Anadarko/Tesoro and Staff are unjustified. Carriers' IB at 124.

DR&R Rate Base Credit[103]

138. The Carriers argue that DR&R collections and earnings should not be credited against rate base. Anadarko/Tesoro's and Staff's reliance on *Kuparuk Transportation Co.*, 55 FERC ¶ 61,122 at 61,382-83 (1991) (*Kuparuk*), is misplaced, the Carriers contend. According to the Carriers, this is because in *Kuparuk* the Commission adopted an accrual methodology for DR&R and, in contrast, an annuity methodology is used for TAPS. The difference, the Carriers contend, is that the DR&R amounts in this case were computed on an annuity basis and the earnings on the collections are assumed to be necessary to fund the ultimate DR&R obligation. Thus, the Carriers assert, the funds will not be sufficient to cover the obligation if the Carriers do not retain the amounts collected. Allowing a rate base credit would amount to crediting the shippers with presumed earnings twice – once in the annuity formula and again through the rate base deduction, the Carriers contend. Finally, the Carriers claim that their DR&R collections and earnings are insufficient to fund the Carriers' ultimate DR&R obligation and crediting the rate base for these amounts would only further complicate the problem.

139. According to Flint Hills, the principle of intergenerational equity attempts to treat shippers equally over a period of time by ensuring that shippers during one period do not pay disproportionately higher costs than later shippers. Virtually all of the DR&R funds were collected during the first half of the TAPS life, so no funds need to be collected going forward, Flint Hills asserts. Flint Hills argues that intergenerational equity is a requirement for rates to be just and reasonable and must be applied to part of the DR&R funds. Flint Hills claims that intergenerational equity should prevent the use of DR&R funds to reduce the rate base and future shipper's rates. Therefore, Flint Hills asserts, Anadarko/Tesoro's request to credit the rate base should be rejected. In addition, Flint Hills argues that the solution is for DR&R funds to be collected from future shippers and paid to past shippers that paid the majority of

[103] This is issue III.7.

the DR&R expense such as Williams. Since 2006 is approximately the midpoint in the life of TAPS, Flint Hills states that half of the funds can refunded to shippers who paid the DR&R funds from 1978-2006, without interest, and those funds can then be collected from shippers from 2005 forward. Finally, Flint Hills claims this solution would also avoid the controversy as to which rate of return should apply to the earnings on these funds.

140. Anadarko/Tesoro and Staff state that DR&R should be credited to rate base. The Carriers' understate the DR&R balance and do not reflect the use of funds as unrestricted capital, they claim. Moreover, Staff states that the prepayments represent interest free loans from ratepayers, that if not properly recognized, would allow a pipeline to benefit from the time value of the funds without compensating the ratepayers. According to Anadarko/Tesoro and Staff, *Kuparuk* requires pipelines to credit rate base with DR&R collections. 55 FERC ¶ 61,382-83. Anadarko/Tesoro state that this is to: (1) compensate ratepayers for advancing those funds before they are needed for DR&R activities and (2) eliminate the issue of the interest rate at which DR&R funds will grow in the future.

141. Anadarko/Tesoro state that the Carriers' witness, Mr. Van Hoecke, has recognized that in a similar situation, pre-collected funds for future expenses should be deducted from rate base. The amount of the rate base credit in this case, Anadarko/Tesoro assert, will be limited to the amount of the Carriers' current rate base because the amount of DR&R collections and earnings exceed the rate base of $576.86 million. Anadarko/Tesoro state that the amount of collections and earnings through 2005 totals $17.265 billion. Staff asserts that the amount through 2004 is more than $1.5 billion. Anadarko/Tesoro and Staff state that they are not proposing a negative rate base or automatic zeroing out of future Carrier investment. Anadarko/Tesoro claim that even with such a rate base credit, the Carriers would still recover all their operating expenses, a depreciation allowance, an amortization of deferred return from prior periods, and a tax allowance on those deferred returns.

142. Staff states that the problem in this case is that the Carriers began collecting DR&R early and in huge front-loaded amounts and, as a result, the actual collections plus the associated earnings have produced an enormous DR&R fund. The total amount, Staff contends, is both greater than the Carriers' rate base and the amount that will eventually be required to complete the DR&R task. The Commission, Staff states has allowed pipelines with a zero rate base a management fee if needed as an incentive to continue operating the line.

Other DR&R Remedies

143. The Carriers argue that the remedies requested by Anadarko/Tesoro are not necessary or appropriate. The Carriers claim that there has been no overcollection of

DR&R funds. First, the Carriers assert that this is because their liability for DR&R is unlimited and the ultimate scope and costs of DR&R is uncertain. Thus, the Carriers conclude, the relief sought is speculative and premature. Second, the Carriers argue that Anadarko/Tesoro's assumption that specific DR&R collection amounts are identifiable is inconsistent with the TSA. The Carriers were not required to account separately for such amounts and neither the TSA or the Commission's orders accepting it suggested that the amounts collected in rates were traceable to the amounts in the DR&R allowance exhibit. The Carriers assert that the overcollection analysis presented by Anadarko/Tesoro was flawed and when corrected, showed that the 2005 earnings and collections of DR&R would be $2.365 (invested at the Moody's Double A bond rate) or $2.06 billion (invested at the risk-free earnings rate). Use of the Carriers' parents' rate of return on the book value of equity to determine DR&R earnings is contrary to *Kuparuk* that allowed an earnings rate base on the pipeline's weighted average after-tax cost of capital. *Kuparuk*, 55 FERC at 61,382. Next, the Carriers argue that the risk-free rate is the proper rate because that is the only prudent investment strategy. The Carriers also assert that this is the proper rate because they bear the risk with regard to such investments.

144. Third, the Carriers claim that granting a refund, rate base credit or requiring a separate DR&R fund as proposed by Anadarko/Tesoro would violate the rule against retroactive ratemaking and constitute an unlawful taking. The Carriers also argue that the rule against retroactive ratemaking bars the requirement of an accounting, and in addition, argue that it is not required by the TSA. The Carriers state that any revenues that the TAPS Carriers collected for DR&R prior to 2005 have become final, are no longer subject to refund, and were collected without any restrictions or conditions. The Carriers argue that Flint Hills' proposed relief should also be rejected because Flint Hills' proposed reallocation also violates the filed rate doctrine and is not supported by precedent.

145. Anadarko/Tesoro request three additional remedies related to DR&R. First, Anadarko/Tesoro request a full accounting for all DR&R collections and earnings to date. According to Anadarko/Tesoro, the Carriers have never accounted for their DR&R collections and earnings. Anadarko/Tesoro argue that their DR&R calculations, which use the actual, historic, after-tax earnings rates of the Carriers' parents, should be accepted. The Carriers' admittedly did not invest the DR&R funds in treasuries, but instead used the amounts as unrestricted funds, and for that reason the Carriers' proposal to use the "risk free" rate should be rejected. Staff states that this request is reasonable and necessary before the Commission can consider what to do with the fund. The Commission has required an accounting for these types of funds previously and should do so here, Staff contends. Staff states that the accounting must allow the Carriers' to maintain an adequate reserve to meet the estimated costs of DR&R plus inflation for another 25 years until work is completed. Staff states that in addition to the $576 million that the Carriers may retain, the

Carriers should also be allowed to retain the remaining obligation of $2.054 billion. This remaining balance may still be commingled with the parents' general corporate funds, but should also be presumed to continue to earn a return at the parents' book equity rate. Staff also states that if the earnings on the $2.054 billion does not keep up with the cost of inflation, or other changes in the cost of DR&R then the Carriers should be allowed to come to the Commission to request an adjustment to their rates. Staff RB at 78-79.

146. Second, Anadarko/Tesoro and Staff request that the amount of the overcollection be refunded to the ratepayers. Staff and Anadarko/State that the amount of funds collected far exceeds the final cost of DR&R and that amount will only grow for another 25 years. The Carriers should not be allowed to reap a windfall on the excess DR&R collections and Commission precedent does not allow pipelines a return on expense, Anadarko/Tesoro and Staff claim.

147. Third, Anadarko/Tesoro and Staff request that the Carriers be required to account for the collections and earnings and report such amounts to the Commission annually. Anadarko/Tesoro also request the establishment of either a segregated fund if an accounting is not required. In *Kuparuk*, Anadarko/Tesoro claim, the Commission declined to establish a segregated DR&R fund, on the condition that the pipeline establish internal accounting for DR&R. Anadarko/Tesoro assert that the Carriers' claim that DR&R recovery has no meaning outside the TSM is meritless. Anadarko/Tesoro claim that the remedies they are proposing will put the Carriers' DR&R recoveries and projected expenses in sync and ensure that DR&R revenues retained by the Carriers are accounted for in accordance with FERC guidelines.

148. Finally, Anadarko/Tesoro and Staff state that contrary to the Carriers' assertion, implementing a rate base credit on a prospective basis, terminating DR&R collections in the current rates which are subject to refund do not constitute retroactive ratemaking or an unlawful taking. Staff states that the uncertainty of the final cost of DR&R is not a reason for the Commission to abdicate its responsibility to monitor the amount of DR&R collected, recognize and account for the earnings the Carriers (or their parents) have made, to periodically adjust the size of the fund, and insure that in the end, the Carriers will have enough to perform the DR&R without retaining excess amounts. In addition, Staff states that DR&R costs by their nature are unlimited and unknown. However, Staff argues, this is why regulated utilities periodically adjust their rates to keep them in line with the most current cost estimate.

Discussion/Findings

149. Anadarko/Tesoro and Staff are requesting several remedies in this proceeding related to DR&R: (1) a credit to rate base (discussed by the parties in section III.B.7); (2) termination of further DR&R collections in rates (discussed by the parties in

section III.E); (3) a full accounting of DR&R collections and earnings to date; (4) refunds to ratepayers of DR&R over-collections to date; and (5) establishment of either a segregated fund or specific accounting procedures for the DR&R amounts the Carriers are permitted to retain.

DR&R expense

150. The Carriers arguments concerning specific elements of the TSA not being applicable to non-signatories was rejected above. The TSA states: "The DR&R Allowance to be included in the Total Revenue Requirement for each year to provide for the eventual dismantlement, removal and restoration of TAPS is given in Exhibit E. Ex. T/A 33 at 14 §II-4.[104] Exhibit E actually sets forth the DR&R allowance starting from 1984-2011. *Id.* at E1. Therefore, it is clear that the TSA included the recovery of DR&R. It is further found that the TSA DR&R amounts were collected in rates.[105] As Staff correctly points out, the amount collected can be pulled from the TSM. Ex. A/T-33 Ex. E; A/T-44 at 15-20. Addition of "Actual DR&R Collections" from Ex.149 totals over $1.5 billion. So the issue remaining is what earnings these funds have accrued and what the ultimate dismantlement costs will be at the end of the useful life of the pipeline.[106] Until that determination is made, there can be no asserted overcollection as claimed by Anadarko/Tesoro and Staff. The parties have presented various studies and estimates of what they believe the amount of collections and earnings total to date.

151. The evidence in the record supports Anadarko/Tesoro's and Staff's contention that the assumptions underlying the DR&R payment calculations changed over time which potentially caused the Carriers to earn more interest on the collected amounts than originally anticipated. Ex. A/T-140 at 92-93. As pointed out by Mr. Brown, who provided credible testimony on this issue, these changes result in a larger amount of after tax DR&R earnings than originally anticipated when the DR&R collection schedule was established. *Id.* For instance, the useful life of TAPS is now longer

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[104] Ex. ATC-14 at 14 (§II-4), ATC-14 at 54 (Ex. E).

[105] Ex. A/T-140 at 17; Ex. A/T-75 at 38-41; Ex. A/T-3 at 51; A/T-33 at Sec. II-4, Ex. E; A/T-35 at 33-34; Ex.A/T-44 at 20 ln. 117 ("DR&R Allowance"); *Trans. Alaska Pipeline Sys.*, 33 FERC at 61,139 (the Commission stated that the DR&R was based on an accelerated schedule and therefore, the expense is front-end loaded).

[106] Ex. ATC-157 at 11 (Browning stated since TAPS is expected to operate through 2034, "it is practically impossible to estimate, today what the ultimate costs of DR&R will be."). Browning estimated actual cost of performing DR&R at $2.63 billion (in 2005 dollars). However, he also asserts that it could require an additional $2.44 billion presuming removal of the entire pipeline. Exs. ATC-115 at 31, 53; ATC-157 at 3-4, 8-10.

than originally anticipated. The record evidence in this case establishes the useful life needs to be corrected to 2034. Federal corporate tax rates declined from 46% to 35%; the Carriers reached an agreement with the IRS which allowed a $900 million tax deduction for DR&R. Ex. A/T-3 at 77, A/T-78 at 57; A/T-140 at 92-93. The record in this case also shows that the Carriers had unrestricted use of the DR&R collections. Exs. A/T-160 at 42-43; Tr. 6529-31; 6505-06 (Hanley); Tr. 5513 (Sullivan); Tr. 6040-41 (Grasso); Tr. 4030-31 (Olson).

152. While Anadarko/Tesoro's and the Carriers' yearly DR&R allowance amounts are mostly similar (with the exceptions noted below), *see* Ex. A/T-30; Ex. ATC-130, it is the earnings rate that is causing the large disparity in the parties' calculations. Anadarko/Tesoro and Staff argue that the Carriers' earnings on DR&R should account for the fact that the funds were used as unrestricted capital by the Carriers' corporate parents. A/T IB at76; Staff IB at 68. These parties and Staff propose the use of the actual historic earnings rate of the Carriers' parents (after-tax composite returns on equity) which is as high as 28.29 percent and 27.98 percent. *See* A/T-149 at 1; A/T-143 at 46. Anadarko/Tesoro witnesses Brown and Grasso claim that the DR&R collections growing at the parents' actual historic rates will equal $17.265 billion through 2005. Ex. AT-140 at 99-100; Ex. A/T-149.[107] The Carriers claim this study is riddled with errors and have offered their own "corrected" calculations which state that the DR&R collections and earnings total for 2005 would be $2.364. Carriers IB at 119; Ex. ATC-115 at 40-43.

153. The Carriers' flatly reject the use of their parents' rate of return on equity as being too high and, similarly, that is the finding here. As the Carriers' point out, this earning rate assumes that that Carriers are engaging in risky investments. ATC-113 at 42; Carriers' IB at124. It is not surprising that using this extraordinarily high rate results in a DR&R calculation of over $17 billion. *See* Carriers' IB at 121; A/T IB at 77; Carriers' IB at 121. Neither Mr. Brown nor Mr. Hanley (who calculated the return on equity for the parents from 1977-2005) knew of any precedent that supports the use of the parent's return on equity. Tr. 6667, 4989; Staff IB at 68. In addition, Anadarko/Tesoro and Staff fail to cite any precedent for such a rate of return. Thus, Anadarko/Tesoro's proposed earnings rate is rejected and, accordingly, Anadarko/Tesoro's DR&R calculation using the Carriers' parents return on equity is rejected. *See* A/T-149. This is consistent with the conclusions below concerning capital structure where use of the Parent's capital structure is rejected.

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[107] State witness Ives using a weighted cost of capital for the Carriers calculated collections and earnings as of 2005 to be $5.64 billion Exs. SOA-8 at 43-44; SOA-13.

154. Conversely, the Carriers' proposed rate comes in at the lower end of the spectrum with a proposed risk-free earnings rate of United States Treasury securities. Carriers' IB at 120-21; Ex. ATC-113 at 44. This rate is simply too low and fails to take into account that the Carriers basically have failed to create a separate DR&R account and, thus, have had free rein to use the funds as they please. *See* Ex. ATC-113 at 38-39; Staff IB at 68-71; A/T IB at 76-77. Additionally, the Carriers did not invest these funds in these securities. The Carriers also fail to cite any precedent to support their rate and Dr. Kalt's testimony on this issue is not credible. Ex. ATC-113 at 42-44. In refuting Mr. Brown's and Mr. Grasso's "grossly exaggerated rates of return," Dr. Kalt takes issue with such a rate because it essentially requires the Carriers to participate in risky investments. *Id.* However, in light of the fact that there is no DR&R fund at all, it is disingenuous for Dr. Kalt to argue that the appropriate rate is that which "the prudent and rational" investor would take. *Id.* at 44; ATC-113 at 38-39. While the Carriers used the DR&R monies collected as they pleased, they should be required to recognize a reasonable return on such funds. The Carriers' overly conservative "risk-free" rate is also rejected.[108] Thus, the quandary here is to find a balance between the earnings rate of a risky investor and the conservative "risk-free" investor, and more importantly, one that is supported by Commission precedent.

155. Dr. Toof's DR&R calculation in Exhibit ATC-130 (as directed to be corrected below) is the most credible DR&R earnings calculation. First, Anadarko/Tesoro's calculation in Exhibit A/T-30 incorrectly uses the 12 percent Moody's Aa bond rating for the period 1985 through 2005 without adjusting the percentage for changes in subsequent years. Carriers' IB at 120; Ex. ATC 115 at 41. This failure to use actual amounts (the same criticism Anadarko/Tesoro had of the Carriers' DR&R Actual Collected amounts for the period 1977-1981 in their DR&R study) renders this study flawed.[109] Dr. Toof's Exhibit ATC-130 DR&R calculation uses the actual Moody's Aa bond rating for each year. Ex. ATC-115 at 45. Dr. Toof explained that Exhibit ATC-130 presents the results of substituting Moody's Aa rate for the risk-free rate. The record shows that Dr. Horst created the underlying TSM DR&R allowance schedule in the TSA assuming that the revenue stream would earn Moody's Aa bond yield to achieve the desired DR&R expense amount of $872.1 million (in 1977 dollars).[110] Exhibit ATC-130 is Dr. Toof's DR&R calculation using the actual

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[108] Exhibit ATC-129 is based on the "risk-free" rate and is therefore rejected.

[109] A/T IB at 72 n 61.

[110] ATC-115 at 32-33. Dr. Horst's analysis adheres to the depreciation factors included in Exhibit F to the 1985 Settlement Agreement. Mr. Horst also assumed that the cost of DR&R would increase by the Gross National Product (GNP) deflator. Additionally, Dr. Horst (back in 1985) for the period 1985 to 2015 fixed the inflation rate at 6 percent and estimated a Moody's Aa bond yield at 12 percent. Ex. ATC-115 at 33.

Moody's Aa bond rate.[111] In making this calculation, Dr. Toof started with the data from Dr. Horst and corrected Mr. Grasso's methodological and data errors.[112] It is found that use of the actual Moody's Aa bond rate for the years 1977-2005 is the most reasonable approach here. This is consistent with what Dr. Horst did in 1985 to reflect DR&R allowances in the TSA. However, since he was forecasting he presumed a 12% rate for future years. Now that the rates have actually been collected (including the DR&R allowances) consistent with his approach, the actual Moody Aa bond rates can be used to establish earnings on the DR&R funds. This is consistent with the approach utilized in the TSA and it is found that it is equitable to continue such an approach.

156. Anadarko/Tesoro claim that Dr. Toof's calculations do not reflect actual collections for the period 1977-1981.[113] Anadarko/Tesoro are correct in that Dr. Toof replaces the TSM numbers with what he claims are the actual collections for this period. There is no evidence in this record to justify Dr. Toof's replacement numbers for this period. The Carriers claim that Mr. Grasso's calculation incorrectly includes the TSM-6 amounts that are not based on the amounts included in the TAPS Carriers' tariffs for the period 1977 through 1981. Carriers' IB at 119. This argument is rejected and it is found that the correct amounts are indeed found in the TSM-6. As discussed above, the evidence in the record clearly shows that TSM-6 was used to calculate the Carriers' revenue requirements and refund liabilities from the period from 1977- 1985 under the TSA. A/T-140 at 96; A/T-35 at 25, 107; A/T-44 at ln. 117 (TSM-6 data from 1968-2011); A/T-196 at 229-31, 236-37; Staff IB at 68; A/T-195 at ln. 117. The evidence shows that the amounts shown in Dr. Horst's schedule and used by Mr. Grasso reflect the amounts that were used to calculate the TSM revenue requirements and refunds for those years. A/T-140 at 100. Accordingly, the Carriers'

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[111] ATC-130 is ATC-129 substituting the "risk free" rate for the Moody's Aa bond rate. ATC-115 at 45.

[112] Dr. Toof states that Mr. Grasso's errors are that he: (1) incorrectly used the DR&R amounts for the period 1977 to 1981 included in the Dr. Horst schedule which are not the actual amounts collected by the Carriers; (2) incorrectly computes the Carriers' tax saving over the period 1977 to 2003 (Dr. Toof states that it should only be from 1988 to 2003); (3) ignores that the Carriers have waived collection of the TSM DR&R allowance on intrastate throughput and did not include the short fall in the interstate revenue requirement and; (4) he incorrectly uses the 12 percent rate assumed by Dr. Horst in 1985 instead of the Moody's Aa bond yield for the period 1985 through 2005. *Id.* at 40-41.

[113] Dr. Toof claims that he used the numbers used in the ICC filings. However, as discussed above, these numbers were not collected through the Carriers rates for TAPS for the years in question.

attempt to use the numbers they claim were in their initial ICC filings is rejected. Carriers' IB at 119-20; ATC-115 at 41.

157. Consequently, it is found that the record reflects that the TSM model numbers for these years should be used since this is what was actually collected in rates. Support for this is found in Dr. Toof's testimony at Ex. ATC-126 column titled "1985 TSM Model." These are the numbers used by Grasso for the same years. See Ex. A/T-149. These numbers are also corroborated by Ex. A/T-195. As a result, Dr. Toof's study will be corrected by replacing the TSM numbers in his "Adjusted DR&R Allowance" column, starting with 1977 through 1981 in Exhibit ATC-130.[114] Thus for 1977- 1981 the numbers found in Grasso's Ex. A/T-149 for DR&R allowances collected will be used. The results of this amended exhibit will be reported to the Commission in a compliance filing.

158. The evidence in the record supports a finding that the Carriers' weighted average nominal after tax cost of capital is the most reasonable rate for reflecting future earnings on DR&R monies already collected. Since a Carrier is presumed to eventually earn the weighted average nominal after tax cost of capital on rate base items a similar assumption can reasonably be applied here. Thus, it is found that from 2006 forward, the Carriers will calculate the earnings of the DR&R account using their weighted average nominal after tax cost of capital[115] (with the adjustments from above as their starting point). Anadarko/Tesoro's argument is now moot since their argument has been addressed by the mandated adjustment above which modifies the 1977-1981 data to reflect the TSM amounts of DR&R for this period (found in Dr. Horst's TSM-6 schedule). A/T-44 at ln.117.

159. Accordingly, pursuant to the findings above, it is concluded that the amount of DR&R collections and earnings to date will be calculated using the methodology in ATC-130 (page 1 of 2) with the following modifications: (1) Exhibit ATC-130 shall be modified to replace the "Adjusted DR&R Allowance" for years 1977 through 1981 with the amounts from the "Actual" column in Exhibit ATC-126 (*see also* A/T 149 column "Actual DR&R Collections") for years 1977 through 1981 and (2) Exhibit ATC-130 "Moody's Aa" column shall be utilized to calculate the Carriers' after tax accumulated balance for the every year starting with 1977 thru 2005 and starting in

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[114] Exhibit ATC-130 shall be modified to replace the "Adjusted DR&R Allowance" for years 1977 through 1981 with the amounts from the 1985TSM Model column in Exhibit ATC-126 (*see also* A/T 149 column "Actual DR&R Collections"). In other words, the DR&R numbers for 1977-1981 will be the numbers reflected in the TSM.

[115] For clarity, this equals the addition of nominal weighted rate of return on equity and the weighted cost of debt.

2006 and forward, the earning on DR&R shall be calculated using the Carriers weighted average nominal after tax cost of capital. Thus, the funds collected will continue to earn at a reasonable rate consistent with this decision.

160. Anadarko/Tesoro and Staff argue that there should be no further collections for DR&R expense because: (1) the Carriers failed to support any DR&R allowance; (2) the Carriers have failed to account for amounts collected and associated earnings thus far; (3) the Carriers have already overcollected DR&R; and (4) basic assumptions underlying the original DR&R schedule have changed. Anadarko Tesoro and Staff are correct that the Carriers have failed to make a showing, *prima facia* or otherwise, that further DR&R collections are required. *See* Staff IB at 66-70; A/T IB at 75-77. Further corroboration of this is that the Carriers failed to include DR&R in their Opinion 154-B presentation and Dr. Toof and Mr. Van Hoecke only offer terse DR&R discussions that also fail to support any further DR&R collections.[116] In addition, although Mr. Browning provides extensive testimony regarding his DR&R cost estimates, the Carriers fail to show that they still have not collected sufficient DR&R to cover the estimated amount. *See* ATC-157 (Browning). Thus, it is found that the Carriers have not cost justified additional collections of DR&R expense through future rates and, accordingly, the expense is not permitted to be collected in the cost based 2005 and 2006 Carriers' rates. This is consistent with Commission policy.[117]

Rate Base Credit

161. Anadarko/Tesoro and Staff contend that a portion of the amount collected should be credited to rate base or refunded because the Carriers have amassed "a DR&R fund that is enormous" and "far outstrips anyone's estimate of what the eventual DR&R task will require." Staff IB 64, 90-94; A/T IB at 106-10. Anadarko/Tesoro and Staff advocate a rate base credit for DR&R while Flint Hills and the Carriers vehemently oppose such a credit. Anadarko/Tesoro and Staff cite

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[116] Staff IB at 70; A/T IB at 75; ATC-12 at 27, 29 (Dr. Toof's mention of DR&R expense only includes a reference to the stipulated DR&R allowance in the TSM); ATC-35 at 33 (Van Hoecke simply states that that he did not include any DR&R in his Opinion 154-B analysis). An inference is made that the Carriers deemed they did not need to collect any additional DR&R in costs based rates. This is distinguishable from their rate filings for 2005 and 2006 which included an allowance for DR&R. Ex. ATC-12 at 27, §II.D.10. Dr. Toof acknowledged that the TAPS TSA revenue requirement included an allowance for DR&R but the Carriers did not support such under their 154-B proxy.

[117] *See Sabine River Authority*, 10 FERC ¶ 61,241 at 61,451 (1980); *FPC v. Natural Gas Pipeline Co*, 315 U. S. 593-96.

Kuparuk in support of the proposition that the Carriers must credit rate base so that the Carriers do not "reap the time value of these funds without compensating rate payers" and to "eliminate the contentious issue of the interest rate at which DR&R funds will grow in the future."[118] The rate base in this case is $576.86 million. The remaining rate base in TAPS will be fully depreciated by 2011. Tr. 2685 (Van Hoecke). However, Strategic Reconfiguration will add some rate base as it is built. Anadarko/Tesoro argue that only a portion of the DR&R be credited against rate base. Essentially, crediting rate base would zero it out. The Carriers have effectively distinguished *Kuparuk* from this case by pointing out that in *Kuparuk*, the Commission adopted an accrual methodology for DR&R amounts, while the DR&R here was collected based on the annuity method. *Kuparuk*, 55 FERC at 61,382; Ex. ATC-115 at 33.[119]

162. Noting the impact of this difference is critical. The accrual method takes the total amount of the estimated DR&R expense and divides it into equal payments to be made by the shippers. Tr. 4959. Whereas, under the annuity method, the shippers do not pay the full amount, but some lesser amount which is expected to grow over time to cover the total expense. Tr. 4959-60; Carriers IB at 69; RB at 53-54; Tr.6669. Crediting the rate base for the amounts of collected DR&R under the annuity method would prevent the Carriers from earning the interest on those funds that is to be added to the DR&R "fund" to cover the final DR&R costs. [120] Unlike the instant case in Kuparuk the DR&R did not exceed the rate base. Moreover, the earnings in the instant case have been earning interest for years. Whereas, in Kuparuk the issue was whether the accruing funds should be deducted from rate base rather than from the rate of return.

163. In addition, the other cases cited by Anadarko/Tesoro and Staff for the proposition of crediting rate base are distinguishable.[121] Staff points out correctly

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[118] Staff IB at 63; A/T IB at 71.

[119] Carriers IB at 69-70; RB at 53-54.

[120] It is noted that in *Kuparuk* the Commission was setting rates close to the beginning of service on the pipeline. This is not the case here were we are looking backwards to establish the remaining rate base and looking forward to establish cost based rates under Opinion 154-B which has never been followed to set rates on TAPS.

[121] Staff IB at 63 n. 90 (*Kansas Pipeline Co.*, 96 FERC ¶ 63,014 at 65,100-01 (2001); *ARCO Pipe Line Co.*, 52 FERC ¶ 61,055 at 61,238 (1990)).; A/T IB at 71 n.60 (citing *Enbridge Pipelines (KPC)*, 100 FERC ¶ 61,260 at P 289-95 (2002); *Koch Gateway Pipeline Co.*, 79 FERC ¶ 61,388 at 62,648 (1997); *Williston Basin*, 72 FERC at 61,365; *Endicott Pipeline Co.*, 55 FERC ¶ 63,028 at 62,648 (1991); *Tennessee Gas Pipeline Co.*, 25 FERC ¶ 63,052 at 65,153 (1983), *aff'd in part*, 32 FERC ¶ 61,086 at

that the instant case is different from any cited case. This is because the DR&R collections began early in the TAPS line, in front-loaded amounts contrary to any Commission precedent. The fund outstrips the TAPS current rate base and probably what the eventual DR&R task will require.[122] It is the Carriers who, admittedly, will bear the obligation of paying for the DR&R of TAPS, regardless of the final cost.[123] As discussed above, the final amount of DR&R costs is speculative at this point. Thus, it is concluded that at this time the Carriers will not be required to credit rate base or refund any amounts.

164. The Carriers' arguments that refunds or a rate base credit amount to retroactive rate making or a taking are rendered moot by this finding. Flint Hills' arguments concerning the rate base credit are also moot. Finally, Flint Hills' request that a refund for one-half of the DR&R collected be given to past shippers in the interest of intergenerational equity is also denied due to the unsettled nature of the final DR&R cost issue. The conclusions here synchronize the DR&R balances retained by the Carriers with the expected expense level. This is a reasonable approach which protects rate payers under the circumstances of this case.

Other Remedies

165. Staff and Anadarko/Tesoro correctly classify the DR&R collections and earnings as a prepayment. Staff IB at 93; A/T IB at 71; Tr.5507-08. The shippers' payment of DR&R is indeed a prepayment of an expense that may be refundable in the event that there is a surplus once the DR&R is completed. *See Kuparuk*, 55 FERC at 61,382.

61,220 (1985)). The various cases do stand for the proposition that DR&R should be credited to rate base because the pipeline is assumed to recover the full amount of its costs from the ratepayers and any interest is considered an excess (or compensation). However, in the case at bar the amounts collected and the interest earned become part of the DR&R expense "fund" which are necessary to meet the future total costs. The collections plus the interest earned are needed to meet the total DR&R expense. This is the reality of what the TSA parties agreed to early in the life of TAPS. Moreover in this regard, the shippers have been paying less as a result of this methodology.

[122] Staff IB at 64.

[123] Dr. Toof stated that "[i]t is certainly my testimony that TAPS carriers and their parents have unlimited liability to do the DR&R remediation... if the TSM ran through 2011 to its conclusion, absent extraordinary events that the TAPS Carriers would have the total liability and collected all the DR&R they could collect." Tr. 655. ATC-113 at 38 ("What stands behind the ultimate DR&R expenditures are the TAPS Carriers, themselves, and the parent company guarantees that the Secretary of the Interior has required under the Federal Right-of-Way grant").

166. The Carriers argument that they should not be required to account for DR&R is rejected. The record in this case shows that in fact they have collected DR&R in rates for almost three decades. Importantly, the Carriers admit that there is no "stand-alone" DR&R fund maintained by the TAPS Carriers." Ex. ATC-115 at 33:1-2. Thus, although these arguments were presented to support denying further DR&R collections, they provide additional support for the requirement that the Carriers account for the funds collected.

167. Accordingly, the Carriers will be required to account for the DR&R funds collected and the earnings on such funds. Thus, it is concluded that the Carriers will be required to maintain an accounting of the DR&R and earnings to date using the methodology prescribed above and report such amounts on Form 6 on a yearly basis.[124] These reports will utilize the amounts from the corrected Ex. ATC-130 up to 2005. Starting in 2006 the annual reports shall show the sums credited yearly to DR&R earnings based on the Carriers weighted average nominal after tax cost of capital.

168. The Carriers' argument that requiring them to maintain an accounting of their DR&R collections and earnings constitutes retroactive ratemaking is meritless. Staff and Anadarko/Tesoro are correct. The case cited by the Carriers is distinguished and there is no retroactive ratemaking issue here where the money was collected in jurisdictional rates and related to a jurisdictional service such as the TAPS pipeline.[125] In addition, there are no retroactive ratemaking implications where the remedy is only forward looking, such as the accounting requirement imposed here.[126] Requiring an

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[124] In Kuparuk, supra the Commission required an internal accounting for DR&R and details in annual reports of the sums credited to the DR&R fund. Kuparuk, 55 FERC at 61,382.

[125] The case cited by the Carriers is distinguishable. The Carriers cite, *Public Utilities Commission of California v. FERC*, 894 F.2d 1372 (D.C. Cir. 1990) (*California*), for the proposition that requiring refunds, a rate base credit, or an accounting related to DR&R refunds constitute retroactive ratemaking. Staff and Anadarko/Tesoro correctly point out that in *California* the deferred tax reserve had been collected in jurisdictional rates and the rate base credit would have been to non-jurisdictional assets. 894 F.2d at 1380. The court's concern there was that the Commission's credit for the funds collected was "not attached to, derived from, or related to" the service. *Id.* at 1379. In contrast, here there is no matching issue since "the DR&R funds were collected in jurisdictional rates and relate to the jurisdictional TAPS pipeline." A/T RB at 89.

[126] The Carriers cite *Tarpon Transmission Co.*, 57 FERC P 61,371 (1991), to support their argument that the Commission lacks authority to return overrecoveries

accounting of DR&R collections and earnings is wholly consistent with Commission precedent.[127] DR&R collections are for an anticipated expense that may need to be refunded to the shippers in the event there is a surplus. Flint Hills' requested remedy is also denied due to the speculative nature of the actual DR&R expenses at this time and up to the time the Carriers have to undertake the dismantlement. In addition, as Staff points out, granting the refund contemplated by Flint Hills will be a monumental task that, if undertaken at all, should be when all final costs are known. *See* Staff RB at 87 n.285.

169. In conclusion, it is found that while the question of the ultimate cost of DR&R lingers, the question of whether refunds are necessary is premature. The Carriers will not be required to credit rate base or refund any DR&R at this point. However, the Carriers will be required to maintain an accounting of the DR&R amounts collected and returns on such amounts in their Form 6 report as described above.

Issue III. F. What is the appropriate return on investment?

1. The Carriers claim that the cost of capital should be based on the capital structure of the Carriers' parent companies, the parents' companies cost of debt, and a cost of equity established using the DCF methodology with oil pipeline proxy companies or using a risk premium methodology if appropriate oil pipeline proxy companies are unavailable. Additionally, the Carriers argue that they should get a two percentage point equity risk premium to reflect the extraordinary risks associated with TAPS.

Issue III. F. 1. What is the appropriate capital structure?

170. The Carriers and Flint Hill claim, the appropriate capital structure to be used by each TAPS Carrier is the actual capital structure of its parent company. The Carriers assert that in Opinion 154-B, the Commission required oil pipelines to use actual rather than hypothetical capital structures of either the pipeline or its parent. Carriers' IB at 74 (citing Opinion 154-B, 31 FERC at 61,836). In addition, the Carriers claim that the Commission also held that a pipeline should use its parent's

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to ratepayers. This case is inapplicable since the accounting requirement only concerns the 2005 rates forward. In addition, Anadarko/Tesoro cite Tarpon to argue that a surplus must be refunded to ratepayers. As discussed above this request has been denied as premature.

[127] *See Kuparuk*, 55 FERC at 61,382; *see Sepulveda*, 117 FERC at P 74-75 (The Commission required SFPP to provide an accounting of "regulatory costs outstanding at the beginning and end of each year and the amount of those costs recovered during each year.").

actual capital structure if the pipeline has issued no long-term debt, has issued long-term debt to its parent, or has issued long-term debt to outside investors guaranteed by its parent. That is the case here, the Carriers claim. The Carriers also assert that the Commission has approved the use of pipeline's parent company's capital structure in each oil pipeline filing it has considered and never imposed a hypothetical capital structure on an oil pipeline.[128] Moreover, the Carriers add that the 71.42% equity ratio that represents the ownership weighted average equity ratio for the TAPS Carriers' parents from 1968 through 2005 is similar to the 71% equity ratio allowed in *Colonial*.

171. The Carriers state that the ICC and the Commission have recognized that the TAPS project produces a higher risk factor than is normal in crude oil operations and that at one point there was a risk that TAPS would not be completed due to cost overruns.[129] The Carriers claim that these risks had a substantial impact on the financing of TAPS that was so significant that TAPS could not have been financed without the full backing of the TAPS Carriers' parent companies. Therefore, the Carriers contend, it is appropriate that the TAPS Carriers' rates be based on the parent companies' capital structures. This will reflect the capital structure underlying the investment, the Carriers assert.

172. Further, the Carriers claim that the parent companies are vertically integrated, highly diversified oil companies that engage in numerous businesses that have offsetting risks. This is also confirmed by the parent companies' Form 10-K Annual Reports to the SEC, the Carriers claim. In contrast, the Carriers state that they are much less diversified and they have a single asset, in a single location, dependent upon production from one area—the TAPS pipeline. These differences make the business of the TAPS Carriers riskier than the businesses of their parent companies, the Carriers contend. Thus, the Carriers conclude both Commission precedent and the

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[128] The Carriers cite *Kuparuk*, *supra* and *Colonial Pipeline Co.*, 116 FERC ¶ 61,078 at P 62 (2006) (*Colonial*)(constitutes provisional acceptance of an equity ratio as high as 71%).

[129] The Carriers state that these risks include the concentration of TAPS assets in Alaska, the hostility of the Alaskan terrain and weather, the environmental and technical challenges faced by the Carriers in designing, constructing, etc. TAPS, the continuing sensitivity of various state and federal government authorities, the stringent legal requirements imposed on TAPS, the number of time consuming delays caused by the need to obtain multiple approvals from state and federal authorities, the enormous capital investment ultimately required to construct TAPS, the need for investors to fund the entire $9.1 billion project before TAPS could generate any revenue to return to investors, and sabotage.

facts of this case which show that the Carriers' business is more risky than that of the parent companies supports the use of the parent companies' capital structures.

173. The Carriers claim that the capital structure used by the State's and Anadarko/Tesoro's proxy group is inappropriate. First, the Carriers argue that the use of a proxy group to determine the capital structure of an oil pipeline company is unprecedented. The Carriers state that the Commission uses a proxy when applying the DCF methodology to determine the cost of equity. However, Anadarko/Tesoro and the State take the unprecedented approach of using their proxy group as a measure of capital structure in an oil pipeline case. Second, the Carriers assert that the proxy group companies face lower risks than the Carriers because those businesses acquired a' ady built pipelines and have diversified businesses. Third, the Carriers contend that the proxy group companies' capital structures are not all comparable to the capital structures of oil pipeline companies. Fourth, the proxy companies do not have oil pipeline operations in Alaska, and therefore these companies are not subject to the risks associated with the extreme climate and harsh terrain as is TAPS. Fifth, the Carriers argue that determination of a capital structure is not an exact science and involves other factors such as the need for funds and the ability to raise debt. Sixth, the Carriers claim that the capital structure proposed by Anadarko/Tesoro and the State would eliminate the Carriers' ability to raise any debt because the cash flow generated from rates would be insufficient. Finally, the Carriers contend that the bond rating of the DCF proxy group members is just above junk bond status and the suggested proxy structures would cause the Carriers to be on the verge of junk bond status.

174. Next, Flint Hills argues that the oil pipelines cannot be used to establish capital structures in this proceeding. Flint Hills claims that in *Sepulveda*, 117 FERC at 62,376, the Commission rejected the use of the sixth member of the oil pipeline proxy group (Enron Liquids) because its distributions per unit exceeded per unit income in each of the years. In *Sepulveda*, the Commission held that MLPs cannot be used as proxy companies for return on equity if distributions exceed earnings, Flint Hills claims. Flint Hills asserts that during the cross-examination of Mr. Henley it was established that all four of the remaining oil pipeline MLP proxies now have distributions per unit that exceed income per unit for the relevant time periods. In addition, Flint Hills states that Mr. Hanley agreed that based on *Sepulveda*, there was the potential that each of the MLPs might be disqualified for use in an oil proxy to establish capital structures for oil pipelines. Flint Hills claims that Anadarko/Tesoro ignored this decision.

175. Flint Hills also argues that there is no basis for using gas pipeline proxies because in Opinion No. 435, the Commission found that the use of gas companies in proxy groups for oil pipelines was no longer necessary and that using gas pipelines as a proxy for data that was not readily available no longer has to control. Since the

proxy group cannot be used, Flint Hills claims, the only other option is to use the TAPS Carriers' parent's weighted average capital structure. Flint Hills claims that Staff's assertion that all of the parties have constructively agreed to use the same MLP proxy group and that the Commission could accept that agreement as a trial stipulation is preposterous. Flint Hills states that the proposition is flawed because it is likely that not all of the parties (or none of the parties) would have used an oil pipeline proxy group if SPFF Sepulveda would have been issued before testimony was filed and Flint Hills has never agreed to use the oil pipeline MLP proxy group. In addition, Flint Hills states that Anadarko/Tesoro also claim that earnings-capped distributions could be used in the DCF calculation. This approach was rejected in *Kern River*, Flint Hills contends. Thus Flint Hills concludes, the parent company capital structures should be used for return and deferred earnings purposes. Alternatively, Flint Hills argues that the record must be supplemented for cost of equity purposes.

176. Flint Hills claims that no Commission authority exists to use gas pipeline proxies in this proceeding. Staff suggests the use of a gas pipeline proxy group as an alternative, Flint Hills claims. Flint Hills states that Staff supports this proposition by citing *SFPP L.P.* which stated that the Commission used to rely on gas pipelines as a proxy. Flint Hills asserts that since this evidence is no longer available, it is inappropriate to go back to using gas pipelines as a proxy. In addition, Flint Hills claims that Anadarko/Tesoro witness Mr. Hanley did include an analysis using gas pipelines. However, Flint Hills claims, Mr. Hanley made it clear that he had not included the gas pipeline proxy as a recommended basis for determining the capital structure of TAPS or as a substitute for the four oil pipeline MLPs. Finally, Flint Hills states that no party's rate of return witness was on notice with respect to the possible problem with the use of oil pipeline MLP proxies prior to filing written testimony and therefore none of the witnesses addressed the problem or other avenues to address the issue. If any of these issues, including using the proposed oil pipeline MLP proxies are to be considered in the Initial Decision, in light of the *Sepulveda* decision, the hearing in this proceeding would have to be reopened so that additional pre-filed testimony could be submitted and witnesses cross-examined, Flint Hills claims. Flint Hills states that this can be avoided if the parents' weighted average capital structure is used.

177. Anadarko/Tesoro state that the appropriate capital structure for TAPS for 2005 is 55% debt/45% equity and for 2006, 58% debt/42% equity per the evidence sponsored by Mr. Hanley. Anadarko/Tesoro claim that the Carriers' capital structures are inappropriate because the parents have unusually high equity ratios.[130]

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[130] Anadarko/Tesoro state that the Carriers propose capital structures for each of the Carriers while Anadarko/Tesoro propose only one overall capital structure.

Anadarko/Tesoro state that their study focuses on the cost of capital for 2005 and 2006 while the Carriers have attempted to reconstruct capital structures, equity costs and debt costs back to 1984. First, Commission precedent requires the rejection of "anomalous" capital structures, Anadarko/Tesoro contend. Specifically, Anadarko/Tesoro argue that where the regulated entity does not provide its own financing, the Commission uses either the capital structure of the regulated entity's parent or a hypothetical capital structure. Anadarko/Tesoro assert that the Commission has recognized that typical equity ratios are in the range of 45%-55%.

178. Second, Anadarko/Tesoro argue that the Carrier's equity-rich capital structure with an equity ratio as high as 87 percent or 85 percent is unprecedented and unsupported by case law. Anadarko/Tesoro claim that the Carriers structures are anomalous as compared to both Commission precedent and the DCF calculations. In fact, Anadarko/Tesoro claim, the Carriers' witness Prof. Williams confirmed that equity ratios as high as those proposed by the Carriers (85% for 2005, 87% for 2006) have never been approved by the Commission. In addition, Anadarko/Tesoro state that nothing cited by Flint Hills supports the Carriers' unreasonable capital structures. Anadarko/Tesoro also assert that the equity structures proposed by the Carriers are also anomalous when compared to the proxy group used by all the parties for the DCF calculation (including the Carriers). The Carriers' use of an equity rich structure is not justified by the risk associated with TAPS, Anadarko/Tesoro assert. Anadarko/Tesoro claim that the original risks associated with TAPS are irrelevant for setting current rates. According to Anadarko/Tesoro, the Carriers do not have greater risks than their parent companies that participate in the risky world-wide business of oil and gas exploration and production (E&P).

179. Anadarko/Tesoro claim that the cases cited by the Carriers are inapposite. The first case, *Colonial*, is simply a declaratory order and does reach any just and reasonable findings or approve any specific rate of recovery and was conditional subject to reexamination in the pipeline's next rate proceeding, Anadarko/Tesoro claim. Anadarko/Tesoro assert that the 71% equity ratio in Colonial was described as the extreme of what the commission has approved and provides no basis for the Carriers proposed 87%. The second case Anadarko/Tesoro assert, does not support the Carriers 87% equity ratio because in *Kuparuk*, the Commission rejected the use of the parent's 70% equity ratio. Anadarko/Tesoro also argue that the cases cited by Flint Hills were subsequently distinguished by the Commission and do not support the use of their proposed 71.46% equity ratio.[131] Thus, Anadarko/Tesoro conclude, the Carriers proposed parent-based capital structures are unjust and unreasonable and a proxy-based capital structure should be used.

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[131] *See* FHR IB at 34 (citing *Midwestern Gas Transmission Company*, 31 FERC ¶ 61,317; *Alabama-Tennessee Natural Gas Co.*, 13 FERC ¶ 61,224; A/T RB at 65 (citing *Alabama-Tennessee Natural Gas Co.*, 40 FERC ¶ 61,244 at 61,814).

180. Anadarko/Tesoro claim that their proxy-based capital structure, sponsored by Mr. Hanley, is supported by substantial record evidence and Commission precedent. Anadarko/Tesoro state that this is the only hypothetical that is supported by substantial evidence in the record. Mr. Hanley's capital structure was supported by the State, Anadarko/Tesoro contend. Moreover, Anadarko/Tesoro assert, the Carriers' witness Mr. Williamson used the same proxy group for his test period DCF analysis. According to Anadarko/Tesoro, the Carriers claim that Mr. Hanley's proxy group is appropriate for determining the DCF-based cost of equity for TAPS, but not for determining capital structures. Anadarko/Tesoro state that the Carriers' arguments that the use of a proxy group capital structure is unprecedented for an oil pipeline, is not reflective of the operation and business risks of TAPS, is not representative of the capital structures of other Alaskan oil pipelines, and would impair the Carriers' ability to raise capital. These claims have been addressed by the showing that the parent-based capital structures are unjust and unreasonable and that the Commission's policy is to reject parent-based capital structures that are anomalous or unrepresentative of the pipeline's risks, Anadarko/Tesoro claim. Furthermore, Anadarko/Tesoro state that the Commission has adopted hypothetical capital structures for regulated pipelines in order to mitigate the effects on ratepayers of paying abnormally high equity ratios.

181. Anadarko/Tesoro also assert that the Commission has never approved a capital structure anywhere close to the 100% equity ratio suggested by Professor Williams. The Carriers claim that the equity ratio in Kuparuk is instructive here, Anadarko/Tesoro contend. Anadarko/Tesoro state that contrary to the Carriers' position, Anadarko/Tesoro's equity ratio of 45% for 2005 and 42% for 2006 are closer to Kuparuk's 57% equity ratio than the Carriers' 85% for 2005 and 87% for 2006. Anadarko/Tesoro also state that unlike TAPS the Kuparuk system is anchored by a single small supply source and has historically faced throughput risks; however, the Carriers still argue that Kuparuk was less risky than the proxy companies used in the DCF calculation.

182. Anadarko/Tesoro also state that Flint Hills' argue that Master Limited Partnerships (MLPs) should not be used as proxy companies to determine the TAPS capital structure, to the extent that MLP distributions exceed earnings. However, Anadarko/Tesoro claim, that the distribution vs. dividend distinction only arises in the context of calculating equity returns under the DCF analysis and has never been cited by the Commission as a relevant consideration in the determination of an entity's capital structure. Anadarko/Tesoro also state that the Carriers' concerns about the ability to raise capital under Mr. Hanley's capital structure are without merit since the evidence cited by the Carriers to support these claims was discredited at the hearing.

183. Staff states that since TAPS does not provide its own debt financing all the parties have proposed an alternative. The Carriers' proposal to use the capital

structure of each parent presents the kind of "anomalous" situation the Commission wants to avoid, Staff asserts. The Carriers' proposal averages about 85% equity and 15% debt and does not reflect the risk of the Carriers and it is not similar to the capital structures allowed for other oil pipelines. The proxy group used by Anadarko/Tesoro and the State are based on a hypothetical proxy group that is identical to a typical oil pipeline. Staff states that this is the same hypothetical proxy group used in *SFPP, L.P.*, 69 FERC P 61,279. The applicability of the proxy group used by Anadarko/Tesoro and the State was shown through an empirical study which showed the risk profile of TAPS was comparable to that of the oil pipeline proxy group and Mr. Hanley's alternative gas pipeline proxy group.

184. Staff states that the only potential problem is that all of the members of Anadarko/Tesoro's and the State's proxy group are MLPs. In *High Island Offshore System, L.L.C.*, 110 FERC ¶ 61,043 (2005), *order on reh'g*, 112 FERC ¶61,050 (200), *order on reh'g*, 113 FERC ¶ 61,280 (2005) (*HIOS*), the Commission excluded MLPs from the proxy group used to determine a jurisdictional partnership's equity cost unless the distributions by the MLPs have the same characteristics as a corporate dividend. Additionally, Staff states that *Sepulveda)*, 117 FERC ¶ 61,285, addressed the use of MLPs in the same equity proxy group and determined it was flawed.[132] Staff states that the Carriers' parents are highly-diversified and different companies than their regulated pipeline subsidiaries (the Carriers). The parents do not represent the same risk profile as the Carriers and are therefore anomalous for capital structure purposes, Staff argues. In addition, Staff states that whatever proxy group is adopted for equity purposes should also be used for capital structure purposes.

185. Staff's reply brief also states that Anadarko/Tesoro and the State rely on the average capital structure derived from the same proxy group they used to determine ROE. This "matching" of proxy groups for purposes of return on equity and capital structure is both rational[133] and consistent with Commission precedent. According to Staff, the Carriers' request to use the capital structures of their parent companies, but never actually state what those equity/debt rations are in their initial brief. Staff suggests that this is because the result is an 85% equity ratio for base year 2004 and 87% equity ratio for base year 2005 which is higher than any ratio ever approved by the Commission. Staff states that in light of the Commission's requirements, the Carriers' proposed equity structure cannot be accepted. Staff claims that all the parties that presented ROE evidence used the identical proxy group in their DCF

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[132] Staff also cites *Kern River Gas Transmission Company*, 117 FERC ¶ 61,077 (2006) (Opinion No. 486).

[133] Staff states that this "matching" is rational because since the ROE and capital structure are supposed to reflect the level of financial risk, it makes sense that they both reflect a similar financial risk. Staff RB at 52.

calculations, but the Carriers refuse to use Anadarko/Tesoro's and Staff's proxy group for the capital structure. Staff states that the Carriers' refusal to match the proxies, and thus, the risks used to determine both ROE and capital structure, makes the Carriers' proposal anomalous and it should be rejected by the Commission.

186. Staff also states that the Carriers' attempt to cite *Colonial* to support their high equity ratio fails for a number of reasons. Staff asserts that the State claims that Colonial does not apply to this case because: (1) the Commission never in fact approved the proposed 71% equity ratio as just and reasonable, (2) the order only mentioned the proposal to note that it was "at the extreme" of anything approved in the past, (3) the order pledged to review the proposal upon completion of the project based upon Colonial's circumstances and Commission precedent at the time, (4) the proposal concerned financing for an expansion project yet to be built, not a thirty-year old pipeline with a successful operating and earnings history, and (5) the order was not premised on any evidence in a litigated record. Staff RB at 55, State IB at 51-52. Staff claims that *Kuparuk* is also distinguishable because the 58% equity ratio approved in *Kuparuk* is nowhere near the 85-87% proposed by the Carriers. Staff claims that the 58% approved for Kuparuk is still too high for TAPS because Kuparuk faces additional risks that TAPS does not encounter today. Staff RB at 55, *Kuparuk*, at 55 FERC at 61,378. Finally Staff states that the Carriers' criticisms of Anadarko/Tesoro's proxy capital structure are unfounded.

187. The Carriers' arguments concerning the operating, economic, and regulatory risks of TAPS is unconvincing, Staff claims. Contrary to the Carriers' contentions, Staff states that the fact that all of the TAPS assets are in Alaska is no different from any other pipeline that is tied to a specific field and location. Staff further notes that the proven reserves are enormous, most of the volumes are shipped by the Carriers' affiliated producers that help assure consistent throughput and revenues, the hostile Alaskan terrain is not unusual as many oil pipelines operate in hostile environments. In addition, Staff states that the scrutiny of the State and Federal authorities over TAPS operations suggests that TAPS is a safer operation. Staff also asserts that diversification may reduce risk; however, there is no evidence showing that diversification among risky projects results in overall low risk as suggested by the Carriers.

Discussion/Findings

188. The appropriate capital structure is an integral part of any return calculation. Staff IB at 70. In calculating the rate of return, the first step in the process is to determine the appropriate capital structure which consists of the appropriate debt and equity percentages. A/T-4 at 2. The capital structure of an entity should also be commensurate with the business risks of the enterprise. *Id.*; *SFPP L.P.*, 96 FERC at 62,066. In addition, the capital structure should not be based on the parent company's

capital structure unless the parent company's business risks are equivalent to those of an operating oil pipeline. *Id.* The Commission will usually use the capital structure of the regulated entity unless it does not provide its own financing, in which case, the Commission will look to the parent company. Staff IB at 71; *Entrega*, 113 FERC at P 32. The Commission, in Opinion 435-B 96 FERC at 62,066, stated that there is a strong presumption in favor of using the parent company's capital structure Staff IB at 71; *see ARCO Pipeline Company,* 52 FERC ¶61,055 (1990) at 61,233 (*ARCO*). However, if the Commission finds that the parent company's capital structure is "anomalous relative to the capital structures of the publicly-traded proxy companies used in the DCF analysis and capital structures approved for other regulated pipelines," the Commission will use a hypothetical capital structure.[134] In addition, Opinion 154-B states that "the Commission shall use a pipeline's or its parent's actual capital structure, but will allow participants on a case-specific basis to urge the use of some other capital structure." 31 FERC at 61,833.

189. None of the TAPS Carriers issues debt without guarantees by the parent.[135] Ex. ATC-45 at 5; ATC-56 at 42-43. Thus, in cases such as this where the regulated entity has no debt of its own, the next step is to look to the capital structure of the Carriers' parents. *See SFPP,L.P.*, 96 FERC at 62,067. The Carriers' parents' capital structure is inappropriate because: (1) it falls well outside the range of capital structures normally approved by the Commission and (2) does not reflect the risks faced by the Carriers. First, the Carriers' proposal to use the weighted average equity ratio of the parent companies for the period 1968-2005 (71.42%) is rejected since no support can be found in Commission precedent or the record to support the use of such a high ratio.[136] The Carriers cite *Colonial* and *Kuparuk* in support of their 71.42% equity ratio; however, those cases simply do not support the Carriers' claim.

190. The Carriers argue that the Commission accepted a 71% equity ratio in *Colonial*. 116 FERC at P 59, 61-62, 65; Carriers' IB at 59. However, Colonial does

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[134] Staff RB at 53 (quoting *Entrega*, 113 FERC at P 32); A/T IB at 79. Although as the Carriers argue, *SFPP, L.P.* did not impose a hypothetical capital structure on the pipeline, this case does, however, stand for the proposition that the Commission will impose a hypothetical capital structure where the capital structure is "clearly contrived, and...its financial risk [is] clearly different from that of its parents." 96 FERC at 62,068.

[135] Carriers' IB at 74 n.68.

[136] *See Entrega Gas Pipeline Inc.*, 113 FERC ¶ 61,327 at P 32 (2005) (*Entrega*) (65% equity); *ARCO Pipeline Co.*, 52 FERC ¶ 61,055 at 61,243 (1990) (*ARCO*) (44.12% equity); *Transcon. Gas Pipeline Corp.*, 84 FERC ¶ 61,084 (1998) (*Transcon*)(57.58% equity); *Mobile Oil Corp., v. SFPP, L.P.*, 96 FERC ¶ 61,281 at 62,068 (2001) (*SFPP, L.P.*) (39.26%).

not support the Carriers proposals. In Colonial the Commission never accepted the proposed 71% equity ratio as just and reasonable stating that such a ratio is "at the extreme of what [the Commission has] approved in the past," "toward the upper end of the zone of reasonableness." The Colonial order stated it would rev · the proposal upon completion of the project. The order was based on several factors that applied to Colonial, but do not apply to the Carriers. *See id.* at P 62. Colonial was embarking on a proposed mainline pipeline expansion that the Commission recognized was going to present "substantial challenges" such as the length and scope of the project, enormous investment involved, financing challenges, the challenges of constructing a multi-state project, and the short time for completion of the project. *Id.* at 59. As discussed more below, the Carriers are not facing such risks since TAPS is complete and the Carriers have no further need to raise funds for construction. Thus, the risks facing Colonial are not analogous to those facing the Carriers and therefore *Colonial* does not support granting the Carriers an equity ratio "toward the upper end of the zone of reasonableness." *See id.* Moreover, the Colonial order (a declaratory order) was not premised on a litigated record unlike the instant case.

191. *Kuparuk* also fails to lend support to the Carriers' proposed equity ratio. First, as Anadarko/Tesoro point out, the 57.8% equity ratio approved in *Kuparuk* simply cannot be read to support the Carriers' much higher proposal of 71.42% (87% according to Anadarko/Tesoro and 85% according to Staff). A/T RB at 61; Carriers' IB at 75-76; Staff IB at 74. The Carriers also state that in *Kuparuk*, the Commission reversed the initial decision's refusal to use the parent companies' capital structure because the initial decision's "analysis [did] not overcome the strong preference in Opinion 154-B for the use of a parent company's capital structure if the parent guarantees the oil pipeline's external debt." Carriers' IB (quoting *Kuparuk*, 55 FERC at 61,377). However, in Kuparuk the Commission rejected use of the parent's 70% equity ratio for 1984. Id. at 61,378. In Kuparuk the Commission noted risks in Kuparuk then that do not apply to TAPS. The risks in Kuparuk are not present in TAPS and as a result it is concluded that the 58% equity ratio approved there is too high for TAPS. Kuparuk, does not support the Carriers' contentions because there is substantial evidence in the record to support a finding that the Carriers' risks are not at all comparable to the risks of their parent companies.

192. Second, the record shows that the Carriers' parents' risks are simply not representative of the Carriers' risks. The Carriers' parents are involved in various highly risky and competitive world-wide E&P undertakings.[137] E&P is "an intensely

[137] A/T IB at 81-82; Staff RB at 55-59. *See* Ex. A/T-205 at 5 (S&P Report Table 2 listing all of the Carriers' parents as comparable E&P companies, except for Koch which is not publicly traded and only has a 3% ownership interest in TAPS.); Tr. 1419-20; Ex. ATC-1 at 5; A/T-206 at FS-2; Exs. A/T 207-209. *See also* Hanley, Ex. A/T-53 at 8-9; A/T-59. The parent's earnings are derived mostly from E&P from

competitive, capital intensive, volatile, and cyclical industry." Ex. A/T-205 at 6. Conversely, the Carriers are solely engaged in the TAPS pipeline monopoly with little remaining unrecovered investment.[138] More specifically, the evidence in the record shows the following: (1) TAPS has no direct competition and it is extremely unlikely that TAPS will face competition from another pipeline in the future[139]; (2) there is "no alternate means of transporting crude oil out of Prudhoe Bay" and "revenues will be generated by the Pipeline Companies as long as Prudhoe Bay crude oil is being marketed," Ex. A/T-160 at 26; Ex. A/T 169; (3) "the likelihood that additional reserves would be found was high and proved to be true," Ex. A/T-100 at 26; and (4) there remains no competition for getting ANS oil to market and the threat of interruption is no greater than average, *id.* In addition, TAPS has "an impressive safety and reliability record" so there is no high risk associated with TAPS operations as argued by the Carriers.[140] The record "runneth over" with evidence that the risks associated with TAPS encountered by the Carriers is simply not comparable to that of the Carriers' parent companies' line of business.

193. Anadarko/Tesoro's witness Hanley confirmed that the risks associated with the original construction of TAPS have no bearing here some 35 years later. Ex. A/T-160 at 19-20, Tr. 2329-34; Ex. A/T-60 (revised at 4-5). Commission precedent instead looks forward to the current risks affecting current rates.[141] Furthermore, the cost of capital is prospective, and here, the examination is focused on the years 2005 and 2006 forward. A/T-160 at 19. Therefore, the Carriers' attempts to impute the risks

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overseas. An insignificant amount of the Carriers' parents earnings are from pipeline operations. *See* Tr. 1419.

[138] TAPS has no competition and is the only means of transporting Alaska North Slope (ANS) oil to market. Hanley, Ex. A/T-160 at 23, A/T-100. A/T at 26, A/T-132 at 8; Baumol, Tr. 3589. The Carriers, pursuant to the TSA, have recovered more than 80% of their investment and by 2006 have recovered more than 96% of their investment (including AFUDC). Ex. A/T-35 at 87; Ex. A/T-146, WP-4 at 4 (compare line 3 with line 7).

[139] Ex. A/T-132- at 9-10; Ex. A/T-100 at 26-27; Ex. A/T-132 at 51; *Trans Alaska Pipeline System*, 10 FERC ¶ 63,026, 65,203 (1980).

[140] Ex. A/T RB at 63; Tr. 2138, 2142; Tudor, Tr. 2135; Wells Tr. 2384; Tye, A/T-214 at 2-3.

[141] *Transcon*, 60 FERC ¶ 61,246 at 61,827. Staff also notes that the rate of return is forward looking and while construction risks may be relevant for newly developed or developing projects, such risks are for the most part irrelevant for a project that was completed 30 years ago. Staff RB at 56. Staff further states that this is another important reason to match a forward looking ROE with a forward-looking capital structure. *Id.*

they faced during the construction and start-up phases of TAPS to the inquiry here are rejected as both irrelevant and disingenuous. Assuming *arguendo*, that it were proper to consider the risks of the original TAPS project, the record also shows that there was no risk that TAPS would not be completed.[142]

194. The Carriers claim that because their parent companies are involved in diverse ventures, this diversification offsets their risks. Thus, the Carriers assert, the parent companies' diverse business is not riskier than the Carriers who have only one asset in one location. The Carriers cite *Container Corp. of America v. Franchise Tax Board*, 463 U.S. 159, 178-79 (1983), for the proposition that such diversification of risk serves to lower a company's risk. The testimony offered by Mr. Wells on risks of the Carriers and their parents is not persuasive in light of the evidence that at least a few of the TAPS Carriers' parents are dependent upon E&P for much of their earnings. Ex. A/T-205 at 5; Ex. A/T-206 at FS-2; Ex. A/T-209 at 39. Furthermore, Mr. Wells' testimony that the parent companies are "far less risky than the TAPS Carriers" is not convincing. Ex. ATC-203 at 12. The extensive record evidence supports the conclusion that the Carriers' parents risks are not comparable to that of the Carriers. Thus, it is found that the Carriers' parents' and the Carriers' business risks are clearly not comparable and that the parent's capital structure should not be used. Ex. A/T-53 at 8-10; Ex. A/T-100 at 6-10; Ex. A/T-160 at 6-8.

195. "The Commission reviews a pipeline's capital structure to assure that it is not contrived, or that the parent company's capital structure is not unrepresentative of the pipeline's risks." *SFPP, L.P.*, 96 FERC at 62,068. The Carriers capital structure (71.42% equity) falls outside the perimeters normally approved by the Commission.[143] While Anadarko/Tesoro claim that typical equity structures fall in the range of 45-55% equity, *see* A/T IB at 80, the Commission clearly views a capital structure with an equity percentage as high as 71% as being at the "at the extreme of what [the Commission has] approved in the past." *Colonial*, 116 FERC at P 62. The Commission's policy is to take those anomalous capital structures or those that are unrepresentative of a pipeline's risks and adjust them so that they are more

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[142] *See* A/T RB at 61-63; A/T-167 (Revised); Ex. SOA-72 at 2; Ex.SOA-73 at 6,891-20; *Trans Alaska Pipeline Sys.*, 10 FERC ¶ 63,026 at 65,198-204 (1980).

[143] *See* Tr. 1408-12, 1414-15 (Williamson states that the carriers' average 87 percent equity ratio is unprecedented); Ex. A/T-53 at 6-7, A/T-100 at 29 (Hanley stated the typical FERC approved capital structure in the rage of 45 percent to 55 percent equity); *see also SFPP, L.P.*, 96 FERC at 62,065 (a capital structure of 45% to 55% debt is consistent with structures generally approved in the oil pipeline industry). Williamson, Tr. 1408-12, 1414-15; Ex. A/T-4 at 5, 12-13; Ex. A/T-53 at 5, 6-14; Ex. A/T-100 at 6-11; Ex. A/T-160 at 5-12, 37-39.

representative of the pipeline's risks.[144] In conclusion, it is found that the Carriers' parents' over-weighted equity structure is anomalous and falls outside the confines of debt to equity ratios previously approved by the Commission and will not be allowed here. In addition, it is found that the Carriers' proposed capital structures are inextricably high when compared to the DCF proxies forwarded by the parties.[145]

196. As Staff points out, the Commission is against using an "unrepresentative parent company capital structure." Staff RB at 60; *SFPP, L.P.*, 96 FERC at 62,068. Staff also states that although the Commission has not yet adopted the use of a proxy group to determine hypothetical capital structures for an oil pipeline, it has adopted proxy capital structures for other regulated entities.[146] Since it has been found that the TAPS Carriers' parent companies' capital structure is "anomalous," a hypothetical capital structure will be employed.[147] This falls in line with Commission precedent using a hypothetical pipeline where the equity structure of the parent is "anomalous." *Id.* The Carriers' parents' equity structure is over-weighted with equity[148] and is not

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[144] In *SFPP, L.P.*, 96 FERC 62,068 (the Commission rejected the use of the parent's capital structure with a 100% equity component in favor of a debt-to equity ratio 61%/29% more consistent with those used in the pipeline industry 45 to 55%); *Alabama-Tennesse*, 40 FERC at 61,814; *HIOS*, 110 P 143,147 *Entrega*, 113 FERC at P 32; *ARCO*, 52 FERC at 61,243; *Transcon*, 84 FERC ¶ 61,084: *SFPP, L.P.*, 96 FERC at 62,068.

[145] The Carriers' equity ratios of 85% and 87.5% as compared to the equity ratios of the proxy companies used in the DCF calculation of 45% for 2005 and 42% for 2006. Ex. A/T-5; Ex.A/T-53 at 5.

[146] *Id.* (citing *Alabama-Tennessee Natural Gas Co.*, 40 FERC at ¶61,244 at 61,814; *HIOS*, 110 FERC 61,043 at P 143,147).

[147] Staff RB at 53; A/T IB at 79; *see Entrega*, 113 FERC ¶ 61,327 at P 32; *see Transcontinental Gas Pipe Line Corp.* 90 FERC at 61,928 (The Commission's policy on determining whether to use the capital structure of the pipeline, as opposed to the parent or a hypothetical capital structure, is now well-defined.); *Michigan Gas Storage Company*, 87 FERC at 61,160; *Alabama-Tennessee Natural Gas Co.*, 40 FERC at ¶61,244 at 61,814 (1987) (*Alabama-Tennessee*); *HIOS*, 110 FERC 61,043 at P 147.

[148] Flint Hills argues that the parent companies' weighted average equity ratio for the period 1984-2004 of 71.46%, Ex. ATC-47, is close to the equity ratios for some natural gas pipelines. FHR IB at 34 (citing *Midwestern Gas Transmission Company*, 31 FERC ¶ 61,317; *Alabama-Tennessee Natural Gas Co.*, 13 FERC ¶ 61,224. The cases cited by Flint Hills to support their contention that a 71.46% equity ratio is close the equity ratios of some natural gas pipelines has been distinguished by the Commission in a subsequent decision. Anadarko/Tesoro and

comparable with the risks associated with the Carriers. Commission precedent mandates using a proxy group in such situations.

197. Anadarko/Tesoro's proxy-based capital structure sponsored by Mr. Hanley is appropriate. As a threshold matter, it is important to note that Mr. Hanley's testimony is credible and afforded considerable weight. Mr. Hanley's proxy is well supported in the record and the Carriers' attempts to discredit this capital structure are baseless.[149] The Commission will use a hypothetical capital structure based on the average equity ratio of a group of comparable MLP companies.[150] First, Mr. Hanley's proxy group is based on a representative group of oil proxy companies previously found acceptable by the FERC, and endorsed by the State.[151] Specifically, Mr. Hanley used Buckeye Partners, L.P., Enbridge Energy Partners, L.P., KinderMorgan Energy Partners, L.P., and TEPPCO Partners, L.P. which are the same four pipeline companies that were used in *SFPP, L.P.*, 96 FERC at 61,099-100.[152] In addition, Mr. Hanley further verified the reasonableness of his capital structure by using bond benchmarks. Ex. A/T-4 at 15; A/T-53 at 12-13. Mr. Williamson used this same proxy group for his test-period DCF analysis. Ex. ATC-45 at 16-17; Tr. 6860-61, 6864-65. Mr. Hanley also demonstrated that "the risk profile of the TAPS Carriers is comparable to both the four oil pipeline proxy group and the alternative gas pipeline proxy group, but significantly below that of the Carriers' parents, who exhibited nearly double the risk of the Carriers and the proxies."[153] A/T IB at 86.

Staff aptly note that a later Commission decision distinguished the two orders cited by Flint Hills and the underlying rational was abandoned. A/T RB at 65 (citing *Alabama-Tennessee Natural Gas Co.*, 40 FERC ¶ 61,244 at 61,814).

[149] Hanley, Ex. A/T-4 at 5, 11-18; Ex. A/T 5 at 1; Ex. A/T-53 at 5-14; Ex. A/T-54 at 1; Ex. A/T-100 at 6-11; Ex. A/T-160 at 5-13, 37-39.

[150] Staff RB at 53; *Alabama-Tennessee*, 40 FERC at 61,815; *HIOS*, 110 FERC 61,043 at P 143,147.

[151] A/T IB at 85; Ex: A/T-4 at 5, 11-18; Ex. A/T-5 at 1, Ex. A/T-53 at 5-14; Ex. A/T-54 at 1. Mr. Hanley's capital structure was endorsed by the State. Ex. SOA-44 at 53-62. Mr. Hanley's proxy group consists of four oil pipeline companies used by the FERC in *SFPP, L.P*, 86 FERC ¶ 61,022 at 61,099-100 (1999).

[152] Ex. A/T-4 at 13-14; Ex. A/T-6 at 6; Tr. 6821-22. These company names have been modified to reflect the impacts of name changes and acquisitions. Ex. A/T IB at 85.

[153] Thus, the record reflects that even as compared with different proxy groups, the parent's equity ratio is still significantly high.

198. The Carriers and Flint Hills take issue, and Staff notes a problem, with all of the members of the oil pipeline proxy group being MLPs. The concern stems from *HIOS*, 110 FERC ¶ 61,063, where the Commission excluded MLPs unless the MLPs' distributions had characteristics similar to a corporate dividend and *Sepulveda* in which the Commission found one company in the proxy group should be excluded for HIOS concerns. 117 FERC at P26. *Sepulveda*, *Kern River*, and *HIOS* present potential problems, as noted by Staff. *HIOS* excluded the use of MLPs unless distributions by the MLPs have the same characteristics as a corporate dividend. 113 FERC ¶ 61,280. As stated by the Commission, the "HIOS issue centers on a concern that the cost of equity capital may be skewed if distributions exceed earnings." *Sepulveda*, 117 FERC P 61,285 at P 26. More pointedly, the Commission explained that:

> [T]he cash distributions of the MLPs it seeks to add to the proxy group in this case include a return of invested capital, in addition to a return on invested capital through an allocation of the partnership's net income..... the Commission uses the DCF analysis solely to determine the pipeline's return on equity. The Commission provides for the return of invested capital through a separate depreciation allowance. For this reason, to the extent an MLP's distributions include a significant return of investment, a DCF analysis based on those distributions, without any adjustment, will tend to overstate the estimated return on equity because the "dividend" would be inflated by cash flow representing return of equity, thereby overstating the earnings the dividend stream purports to reflect.

Kern River, 117 FERC at P 150.

199. In *Sepulveda* the Commission addressed a similar proxy group[154] used by Anadarko/Tesoro and the State and determined that one of the companies exhibited a HIOS issue. 117 FERC ¶ 61,285. The *Kern River* order also casts doubt on whether the oil pipeline proxy can be used to calculate equity return for capital structure purposes.[155] Staff properly notes that in *Sepulveda* and *Kern River*, the Commission did not preclude the use of MLPs if proper adjustments are made to account for the differences between MLPs and corporations.[156] In addition, in a Commission order

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[154] Anadarko/Tesoro eliminated the company the Commission rejected in Sepulveda.

[155] 117 FERC ¶61,077; Staff IB at 26.

[156] Staff IB at 73; *Sepulveda*, 117 FERC at 30 (the Commission did not preclude the inclusion of Enron Liquids (the eliminated MLP) or its predecessor Kinder Morgan Energy Partners in the proxy group in any pending proceedings based on further analysis of the HIOS issue in those proceedings); *Kern River*, 117 FERC at

that was issued after the record in this proceeding was closed (March 27, 2007), the Commission stated that:

> As we noted in *Kern River Gas Transmission Co.*, 117 FERC ¶ 61,077, at P 154 (2006), "[w]e do not intend in this order to foreclose non-MLP pipelines from proposing to include MLPs in the proxy group, with an appropriate adjustment to reflect the differences between MLPs and corporations.

Mojave Pipeline Company, 118 FERC 61,252 at P 14 n.4.[157] The four MLP proxy companies in this case have distributions per unit exceeding income per unit for a portion of the relevant time periods. Tr. 6815-6830:13; Ex. FHR IB at 37. Mr. Hanley addressed the MLP adjustment issue. First, Mr. Hanley stated that there is sufficient evidence in the record to make the adjustments; however, the effect of such adjustments would be minimal. Staff IB at 73; Hanley, Tr. 42/6826/66; Ex. FHR-56, 57, 58, 79. In addition, Mr. Hanley developed a separate proxy group of four diversified gas companies and confirmed that the gas proxy and the oil proxy are comparable from a financial and a business risk view point.

200. The oil proxy group (using the MLPs) yields a significantly lower equity ratio than that of the TAPS Carriers' parents' capital structures (71.42% parents vs. 45% MLP oil proxy). *See* A/T-4 at 4-5; A/T-5 at 1-2. It is relatively close to the capital structure of the gas proxy group (gas proxy 55% vs. 45% MLP oil proxy). *See id.* However, the overall effect as discussed further, *infra*, yields a significantly similar overall nominal cost of capital for 2005 (8.66% MLP oil proxy vs. 8.63% gas proxy). It would not be reasonable, in light of the discussion concerning the risk factors, to scrap Mr. Hanley's MLP analysis in favor of using the Carriers' parents' capital structure that is clearly outside the range usually approved by the Commission.

P 147 (the Commission stated that it was "not making a generic finding that MLPs cannot, in future cases, be considered for inclusion in the proxy group if a proper evidentiary showing is made").

[157] On April 11, 2007, Anadarko/Tesoro filed a motion to lodge the Commission's order in *Mojave Pipeline Company*, 118 FERC ¶61,252 (2007) asserting that the order is relevant to the use of MLPs. Flint Hills filed an answer on April 26, 2007 stating that although it does not agree with Anadarko/Tesoro's arguments, it does agree that the order is relevant and also requests that the order be lodged in this proceeding. Anadarko/Tesoro filed a reply on April 27, 2007. It is found that the *Mojave* order is relevant to the issues in this proceeding and is thus lodged to this record. Anadarko/Tesoro's motion is hereby granted. Although Rule 213, 18 C.F.R. § 385.213 generally does not allow responses to answers good cause exists to allow Anadarko/Tesoro's answer to further supplement the record.

Notwithstanding, the inclusion of MLPs, the equity structure produced by the oil proxy group are reasonable and credible when compared to the other proposed equity structures. Mr. Hanley acknowledged that there were differences in the capital structures of his oil and gas proxy groups (42% vs. 47% equity), but stated that the overall nominal after tax weighted return of both are similar for 2006 (8.60% vs. 8.05%). Ex. A/T-53 at 3-6; Tr. 42/6821, 6832. Moreover, the Commission's concern with MLPs is that "a DCF analysis based on those distributions, without any adjustment, will tend to overstate the estimated return on equity." *Kern River*, 117 FERC at P 150. As shown by Mr. Hanley, the MPL proxy yields an equity ratio lower than both the Carriers' parents capital structure and the gas proxy.

201. Staff also supports the proxy group and finds it particularly persuasive, as it is also found here, that the proxy group risk profile is comparable to Mr. Hanley's alternative gas pipeline proxy group.[158] In addition, Mr. Hanley's proxy group is comparable to capital structures adopted by the Commission for oil pipeline ratemaking purposes. Staff RB at 61. Thus, it is found that the oil pipeline proxy group supported by Mr. Hanley is credible and will be adopted to determine the appropriate capital structure for the Carriers. The capital structure adopted here is comprised of 55% debt and 45% equity for 2005 and 58% debt and 42% equity for 2006 based on the oil pipeline proxy companies.[159] The Carriers claim that each of the Carriers should be able to use its parent's capital structure in its return calculation.[160] The business risks for TAPS are virtually identical for each Carrier. Ex. A/T at 100. Thus, there should be only one rate of return which necessarily means there should be only one capital structure. *Id.* Thus, the Carriers proposal to use individual capital structures for each Carrier is rejected as Anadarko/Tesoro have shown that a single capital structure is more reasonable. Ex. A/T-100 at 11-13; Ex. A/T-160 at 5-6. Moreover, this is further corroborated by the Carriers' witness Williamson's calculation of a singe capital structure. *See* Ex. A/T-100 at 11-13.

Issue III.F.2. What is the appropriate return on equity?

202. The Carriers state that the parties generally agree that the Commission's Discounted Cash Flow (DCF) methodology should be used to calculate the cost of equity (before the risk premium). Although the DCF models used by the Carriers,

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[158] A/T-163; Staff IB at 73; RB at 60-61.

[159] The above findings are dispositive of Flint Hills' argument concerning proxy groups.

[160] The Carriers argue that the use of a proxy group capital structure is unprecedented for an oil pipeline, does not reflect the risks of TAPS, does not represent the capital structures of other Alaskan oil pipelines, and would serve as an impediment to the Carriers' ability to raise capital. Carriers IB at 83-86.

Anadarko/Tesoro and the State are substantially similar, there are still differences. The Carriers state that Anadarko/Tesoro and the State used an additional forecast from the Social Security Administration (SSA) which skews the forecast, resulting in a lower and, thus more favorable cost of equity for Anadarko/Tesoro. The Carriers also state that Anadarko/Tesoro failed to follow Commission precedent and failed to use the Global Insight Gross Domestic Product (GDP) forecasts for years prior to 2005 instead, relied on SSA and Energy Information Administration (EIA) forecasts. Finally, the Carriers state, the principal difference between the TAPS Carriers' position and the opposing parties' position involves the appropriateness of the risk premium.

203. Mr. Williamson applied the DCF methodology to the DCF proxy Group[161] companies for the years in which it was possible to perform that analysis (1994-2004), the Carriers state. Next, for the period 1984 through 1993, for which the necessary data was not available, Professor Williamson used a Commission-approved Risk Premium approach. Last, the Carriers claim, to account for the fact that the risks faced by the TAPS Carriers exceed the risks faced by the proxy companies, Professor Williamson added a two percentage point risk premium to his cost of equity. The Carriers argue that this approach is reasonable. The Carriers state that Professor Williamson conducted a "backcasting" analysis utilizing the Risk Premium approach because the DCF proxy Group did not exist during 1984-1993. The Carriers claim that the Risk Premium approach has been accepted in Commission decisions.

204. Next, the Carriers claim that the Commission will add a risk premium to the midpoint of the DCF Proxy Group Range if the regulated pipeline is riskier than the pipelines in the proxy group. The Carriers state that TAPS is riskier than any Lower-48 oil pipeline and that warrants a risk premium of at least two percentage points. In concluding that a two percentage point risk premium is warranted, Professor Williamson relied on testimony from the original TAPS rate case which documented significant problems regarding TAPS construction. The Carriers argue that this percentage premium is consistent with the two percent risk premium approved by the Commission for Alaska Natural Gas Transportation System (ANGTS) where the Commission concluded that it was appropriate to compensate for the risk of non-completion. The Carriers state that since all of the proxy companies acquired pipelines already in existence and faced no risks associated with building a new pipeline, the two percentage point risk premium is particularly appropriate for TAPS. In addition, the Carriers state that over the period for which Professor Williamson

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[161] "A "proxy group" is a group of comparable companies used to determine a zone of reasonableness of rates of return, and to establish what the proper rate of return should be for the company under consideration." *Petal Gas Storage, L.L.C.*, 106 FERC ¶ 61,325 (2004) (*Petal Gas Storage*).

employed DCF analyses to determine a range of reasonable equity returns for the DCF Proxy Group, the average difference between the high end of the range of returns and the median return was 3.23 percentage points, which is well above the two percentage point risk premium that Professor Williamson recommends.

205. Anadarko/Tesoro claim that the record reflects that using the Commission's preferred DCF model, the appropriate ROE for TAPS for 2005 is 12.16% on a nominal basis (8.90% inflation adjusted), and for 2006 it is 12.31% on a nominal basis (8.89% inflation adjusted). First, Anadarko/Tesoro state that all the parties agree on application of the Commission approved DCF model. Each of the parties that presented evidence on the cost of equity, which includes Anadarko/Tesoro, the State and the Carriers, employed the DCF approach. However, Anadarko/Tesoro contend, because of internal input variations, minor, insignificant differences appear in the parties' calculated ROEs for 2005 and 2006. Anadarko/Tesoro state that Flint Hills who offered no evidence on this point, attempted to cast doubt on the use of MLPs as proxy companies where MLP distributions exceed earnings. Tr. 6814-34. Anadarko/Tesoro state that based on this record, where all the parties sponsoring cost-of-capital evidence agreed on the use of the four MLP oil pipeline proxies for purposes of their DCF analyses the Commission need not consider arguable distinctions between the composition of MLP distributions and corporate dividends. Additionally, Anadarko/Tesoro assert that impact of any such distinctions is minimal and, based on record evidence, could be accounted for through an earnings-capped adjustment to distributions used in the DCF calculation. In conclusion, Anadarko/Tesoro state that there is no material dispute regarding the use of the DCF method, the appropriate proxy companies, or the DCF-determined cost of equity.

206. Second, Anadarko/Tesoro claim that there is no support for a risk premium ROE adjustment. According to Anadarko/Tesoro, the Carriers propose to add a 200 basis point risk premium to the nominal ROE calculated under the DCF method based on the alleged risks facing TAPS. Anadarko/Tesoro claim that it and the State oppose any risk premium adjustment and that the proposal was discredited in its entirety by witnesses Hanley, Makholm, and Ives. Anadarko/Tesoro claim that Commission precedent confirms that the Commission presumes all pipelines to be of average risk. Accordingly, Anadarko/Tesoro claim, the Commission will generally approve ROEs that fall in the median of the DCF range, absent highly unusual circumstances and a showing of anomalously high or low risk. In this case, Anadarko/Tesoro claim the record shows that TAPS has no greater operating risks and its risks from environmental and property damage are less than the proxy group.

207. The construction of the line is irrelevant or of historic interest only, Anadarko/Tesoro claim. In short, Anadarko/Tesoro conclude, since TAPS: (1) was built without any meaningful threat of competition, (2) anchored by vast proven reserves, (3) has shippers who are largely affiliates strongly motivated to ensure the

project's success, and (4) has investment costs that are essentially already recovered (and indeed over-recovered) through nearly 30 years of operation cannot credibly claim entitlement to any risk premium adjustment. Anadarko/Tesoro also argue that the Carriers backcasting is unnecessary because it is improper to recalculate the deferred returns and AFUDC balances in the Carriers' rate filings which already reflect the Carriers' balances from 1977. In addition, the Carriers' backcasting is flawed as shown by Mr. Hanley.

208. Staff states that the parties consistently applied the four proxy companies to the DCF analysis and that there is no material dispute among the parties as to the use of the DCF method or the nominal cost of equity. Staff does, however, note that there is a *de minimus* difference in the parties' DCF-based ROEs which Staff states is due to internal input variations and calculation errors. According to Staff, Anadarko/Tesoro witness Hanley has verified these variations and has shown that they do not result in significant differences in the nominal cost of equity. Staff also states that, as noted previously, the proxy consists of the four MLP oil pipeline proxies the Commission questioned in *Sepulveda* which casts some doubt on the use of MLPs. However, Staff asserts, the unique circumstances of this proceeding may still permit the Commission to accept the group. Alternatively, Staff suggests that the Commission should require the use of a gas pipeline proxy which was shown to represent risks comparable to TAPS and overall returns similar to the oil pipeline group. Staff states that the Commission previously relied on gas pipelines as a proxy for oil pipelines until sufficient evidence on oil pipelines became available. Since with the elimination of the oil proxy group such evidence would no longer be available, Staff asserts, it would be appropriate to go back to using gas pipelines as a proxy.

209. However, Staff states no matter which proxy group is used, the Carriers are not entitled to a special risk premium on their equity rate of return. The Carriers proposed risk premium must be rejected because (1) the rate of return is a forward-looking concept and the TAPS risks of construction are irrelevant and (2) the risks related to the construction and completion of TAPS were not that unusual. Staff claims that the Commission considers all pipelines to be of average risk and will generally adopt ROEs that reflect the median of the DCF range, absent highly unusual circumstances and a show of anomalously high or low risk. In instances where the Commission has deviated from the median to allow a ROE adjustment, it did so based on forward looking-risk factors unique to the regulated enterprise or shortcomings in the available proxy companies, Staff contends. Here, Staff asserts, there is no credible evidence that TAPS faces extraordinary, forward-looking, operational risks. Staff states that the arguments made by Carriers' witness Mr. Wells relate to the risk of construction and/or non-completion, and the risk that the investment will not be recovered. There is no persuasive rationale for burdening current ratepayers for these asserted risks, Staff states.

210. Staff states that the Carriers brief clarifies that their risk premium proposal is entirely related to the construction and completion risks of TAPS which are no longer present. The Carriers' proposal must be rejected because the Carriers have not met their burden to demonstrate that they require a return well outside the median of the DCF range. Staff concludes that the Carriers cannot credibly claim entitlement to any risk premium. Accordingly, Staff states, the appropriate return on equity using the consensus proxy group and applying the Commission's preferred discounted cash flow model is 12.16% on a nominal basis (8.90% inflation adjusted), and for 2006 it is 12.31% on a nominal basis (8.89% inflation adjusted).

Discussion/Findings

211. The DCF approach is based on the premise that a stock's price is a function of expected future cash flows, calculated using current dividend yields and estimated growth in dividends. A/T IB at 87; Tr. 6865. The DCF analysis is applied to the selected proxy group to produce a range of equity returns. A/T IB at 87; *see* Opinion 435, 86 FERC at 61,099. The median range is used by the Commission to set the return on equity for the regulated entity. *Id.* There is a noted exception to this practice. While the DCF analysis is applied in the same fashion to gas and oil pipelines, the calculation for gas pipelines, establishes a "nominal" return on equity, which includes a component for inflation and for oil pipelines a "real" ROE is calculated that subtracts the inflation factor from the "nominal" return on equity. *Id.*

212. The parties agree that the DCF Methodology is the appropriate methodology to employ in calculating the return on equity in this proceeding.[162] In addition, the parties agree that the main point of contention is the 2% risk premium requested by the Carriers. Thus, the argument at hand is focused on whether the imposition of a risk premium is appropriate; however, the issues concerning the *de minimus* differences in the DCF model inputs must first be addressed. The parties agree that their application of the DCF proxy results in a difference that is immaterial.[163] However, the parties do note some difference.

213. First, the Carriers claim that the State and Anadarko/Tesoro used an additional SSA forecast which allegedly skews the DCF calculation and results in a lower cost of equity, to the benefit of Anadarko/Tesoro. Carriers' IB at 89. As stated by

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[162] A/T IB at 87; Carriers' IB at 89; Staff IB at 74-75, *see SFPP*, 86 FERC at 61,099. With regard to the use of MLPs in the proxy group, the Carriers, Staff and Anadarko/Tesoro agree that the use of such a proxy group is appropriate in this proceeding. Carriers' RB at 62 n.199; A/T RB at 69; Staff IB at 75.

[163] Staff IB at 75 n.237; Carriers' IB at 89; A/T IB at 87; Ex. A/T-100 at15-17; Ex. A/T-104 (Column 11).

Anadarko/Tesoro and the State, the differences in the DCF-determined cost of equity is insignificant and attributable to input and calculation differences. A/T RB at 69 n.81; Staff IB at 75 n.237 A/T IB at 87; Ex. A/T-100 at15-17; Ex. A/T-104 (Column 11). Contrary to the Carriers' assertions, Anadarko/Tesoro's use of the EIA and SSA for the long term growth rates is consistent with Commission precedent.[164] The Commission rejected the same argument forwarded by the Carriers' and their witness Mr. Williamson. The argument was that two of the forecasts should be rejected because the forecasts were lower than the others and were thus, as Williston Basin claimed, unreliable. *Williston Basin*, 104 FERC at P31; Carriers' IB at 89; ATC-45 at 23; *See* State IB at 57. The Carriers' witness Mr. Williamson admitted that in *Williston Basin* the "Commission accepted the inclusion of GDP growth forecasts from SSA" for the DCF calculation 104 FERC at P 32; ATC-45 at 45:5-6.

214. Mr. Williamson's reason for excluding the SSA GDP forecasts, *inter alia*, was because they "reflect extreme conservatism" and as stated by the Carriers, "skews the forecast, resulting in a lower and, for Anadarko/Tesoro, a more favorable cost of equity." Carriers' IB at 89; Ex. ATC-45 at 23; *see* Ex. A/T-100 at 24:18-21. Mr. Hanley used the information from the SSA and EIA because it was "freely available and cost-free" whereas getting the DRI/WEFA estimates is "time-consuming and extremely costly." Ex. A/T-100 at 24. A reasonable inference can be drawn here that Mr. Williamson's main purpose for excluding the SSA GDP forecasts in his DCF analysis is because they would yield a lower cost of equity (which is unfavorable to the Carriers). Carriers' IB at 89; ATC-45 at 23, *see* State IB at 57; *see* Staff IB at 62; *see* Ex. AT-100 at 24. In addition, Mr. Williamson's choice to exclude the SSA forecast after admitting that the Commission accepts the SSA forecast in DCF calculations is suspect particularly when the point of the exercise is to determine a range (both high and low) and not just an exact number. Thus, Mr. Williamson's testimony with respect to this issue will be accorded little weight. Mr. Hanley's use of an additional GDP SSA forecast, approved for use in the DCF analysis by the Commission, in his calculation renders his study more reliable than Mr. Williamson's.

215. As an additional ground for rejecting Mr. Williamson's DCF analysis Mr. Hanley notes that Mr. Williamson's calculations contain timing mismatches. To begin with, Mr. Hanley points out that the cost of common equity is prospective, and thus applicable to a future period. A/T-100 at 16. Mr. Hanley states that the calculation should take into account the time period in which investors would examine the data to form their expectations and that is usually the end of the proceeding year (when they form expectations for the following year). Mr. Hanley states that since investor's expectations are formed in the previous year, there is a

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[164] State IB at 57; *Williston Basin*, 105 FERC ¶ 61,036 at 21-33; Ex. ATC-45 at 23.

mismatch between the data used and the expectational cost of common equity capital. *Id.* at 18-19. Mr. Hanley further states that the actual result is not what should be considered, but instead what the investors expected. Thus, the expectational cost for one year is measured by the actual data from the previous year. Mr. Williamson's calculations do not reflect this practice and, accordingly, result in a mismatch between the data used and the expectational cost of common equity capital. *Id.* at 17.

216. Accordingly, the Carriers' DCF analysis is rejected in favor of adopting Anadarko/Tesoro's analysis.[165] As explained previously the differences in the DCF calculations of the Carriers and Anadarko/Tesoro are insignificant. It is found that the appropriate return on equity (ROE) calculated using the DCF methodology inputs of Anadarko/Tesoro for TAPS for 2005 is 12.16% on a nominal basis (8.90% inflation adjusted or real equity return), and for 2006 is 12.31% on a nominal basis (8.89% inflation adjusted or real equity return). Hanley, Ex. A/T-5 at 5, 11-18, A/T-53 at 5, 6-14, A/T-100 at 10, 25-30, A/T-160 at 5-13, 37-39.

217. Now, considering the more significant point, the Carriers claim that a risk premium of 2% or 200 base points should be added to their return on equity because TAPS is "riskier than any Lower-48 oil pipeline." Carriers IB at 90. In *Petal Gas Storage*, the Commission stated that

> [I]t begins the risk analysis for proposed projects with the assumption that pipelines generally fall into a broad range of average risk. Absent highly unusual circumstances that indicate an exceptionally high or low risk as compared to other pipelines, the assumption is made that a pipeline faces average risks (though an examination of a particular pipeline's risk factors may warrant adjusting the ROE higher or lower than the middle of the zone of reasonableness established by the proxy group).

106 FERC at P 8 (citations omitted). The Commission further stated that "we conduct our risk analysis with the presumption that existing pipelines fall into a broad range of average risk, absent highly unusual circumstances that indicate anomalously high or low risk as compared to other pipelines." *Id.* at P 29; Staff IB at 76; A/T IB at 88. Additionally, the Commission requires a "sufficient showing that [the pipeline] is outside the broad range of average risk." *Id.*; *see Kern River*; 117 FERC at P 160-161. Thus, the inquiry here begins with the presumption that the Carriers as an existing pipeline "fall into a broad range of average risk" and await "a sufficient showing" that the Carriers fall outside this broad range. *See id.*

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[165] The HIOS issues in the oil proxy group are discussed under Issue F.1, *supra*.

218. As discussed in Issue III.F.1, *supra* the Carriers have failed to prove that operating TAPS is riskier than the operations of other oil pipelines.[166] In addition, Mr. Hanley notes that TAPS' business risk is average and TAPS's financial risk is average. A/T-4 at 22. The Carriers state that *Colonial* confirms that a rate of return toward the top of the range of reasonableness is justified based on the facts of this case. Carriers' RB at 70-71. Colonial was distinguished from TAPS in Issue III.F.1. The Commission's decision to grant Colonial a provisional acceptance of its equity ratio at the high end of the "zone of reasonableness" was based on the Commission's recognition that Colonial's construction project was going to present "substantial challenges" such as the length and scope of the project, enormous investment involved, financing challenges, the challenges of constructing a multi-state project, and the short time for completion of the project. *Colonial*, 116 FERC at P 59, 61-62, 65. TAPS is a completed pipeline and does not face such challenges at this time.

219. The Carriers assert that the risks TAPS faced during construction merits a 2% risk premium since the challenges and risks that TAPS faced in the past are relevant in the present. However, the case law indicates that the risk premium inquiry is forward-looking. In *Iroquois Gas Transmission Sys., L.P.*, 84 FERC ¶ 61,086 at 61,455-56 (1998) (*Iroquois*), the Commission upheld the ALJ's decision not to move the pipeline's ROE outside the range established by the proxy companies after finding that the pipeline's risk was average and that an "established pipeline serving an expanding market, that it has the security of long-term shipper contracts, and that any risks associated with construction or certification are either past or speculative." The forward-looking nature of the Commission's risk determinations was also confirmed in *Transcon. Gas Pipeline*, 60 FERC at 61,287, where the Commission stated that the inquiry is

> [B]ased on the Commission's evaluation of [the pipeline's risks] which investors perceive while the rates in this proceeding are effective. The Commission establishes rates to apply in the future that reflect projections of what costs, and risks, the pipeline is likely to incur during the period the rates will be in effect. These projections are based on historical experience, adjusted for known and measureable changes that will occur to affect costs or risks during the period the rates will be in effect.

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[166] *See* A/T IB at 88-90; Staff IB at 76. TAPS has an impressive safety and reliability record. Tr. 2138, 2142; Tudor, Tr. 2135; Wells Tr. 2384; Tye, A/T-214 at 2-3. TAPS has no greater than average operating risk. Tr. 2135. TAPS has not had a reportable spill of crude in 4 ½ years. Tr. 2142.

Transcon. Gas Pipeline, 60 FERC at 61,287. Thus, the testimony of witness Wells and the Carriers' other arguments concerning construction risk are irrelevant. Wells, ATC-151 at 6-7. Tr. 2329.

220. The fact still remains that the record does not support a finding that TAPS was a risky enterprise in either its construction phase or its operational phase, and more importantly prospectively.[167] The Commission requires the risks to be sufficiently high to justify a further increase in return. *See Kern River*, 117 FERC at P 177. The Carriers have not satisfied this requirement. Thus, Professor Williamson's extensive discussions concerning risk premiums is rejected. The Carriers' have not cited a case where the return on equity and associated risk premium issue was not a prospective inquiry. It is found that the Carriers failed to rebut the presumption that they face average risks and it is found that the Carriers are not entitled to a 2% risk premium.

Issue III. F. 3. What is the appropriate cost of debt?

221. The Carriers claim that the appropriate cost of debt is that of the Carriers' parent companies. The Commission's policy is that capital structure and long term debt cost should be based on the same entity, the Carriers cla n. According to the Carriers, the Commission's policy in Opinion 154-B is to use the pipeline's parent company's capital structure and cost of long-term debt where the pipeline company does not provide its own financing. The Carriers state that the reasons they provided for using the parent company capital structure also support the use of the parent company's cost of long-debt. The Carriers claim that they and the State generally followed the same approach in determining the cost of debt using the parent companies. The actual long-term debt costs of the Carriers' parent companies are not uniform, and accordingly, Anadarko/Tesoro's proposal to use a uniform hypothetical debt cost for all TAPS Carriers would violate the requirement that each of the Carriers parents be compensated for the debt costs it has actually incurred, the Carriers contend.

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[167] As Staff and Anadarko/Tesoro succinctly state "here there is no credible evidence that TAPS faces extraordinary, forward looking, operational risks. Indeed, the record supports the conclusion that TAPS: (1) was created without a threat of future competition, (2) has recognized oil reserves, (3) is contractually subscribed by affiliated shippers with interests to continue to ensure the success of TAPS, (4) whose original investment has already been substantially recovered, and, accordingly, (5) cannot credibly claim entitlement to any risk premium." Staff IB at 76 (citing Hanley, A/T-4 at 5, 11-18, A/T-53 at 5, 6-14, A/T-100 at 10, 25-30, A/T-160 at 5-12, 37-39). A/T-IB at 91. Ives, SOA-8 at 80; Makholm, SOA-44).

222. Anadarko/Tesoro state that the appropriate cost of debt for TAPS for 2005 is 5.80% and for 2006 is 5 91% as determined by the oil proxy group. The Carriers' use of the parent company debt costs is inappropriate because the parents have materially different risk profiles and capital structures than TAPS. Anadarko/Tesoro claim that where the use of parent company capital structures is inappropriate and unreasonable, it follows that using the Carriers' parents' cost of debt to TAPS is also unreasonable. Anadarko/Tesoro state that Mr. Hanley's cost of debt calculations should be accepted because although the variations in recommended debt rates are minimal, only Mr. Hanley's proposal reflects the consistent use of proxy companies to determine all cost of capital elements. Mr. Hanley's proposal is consistent with Commission precedent that requires the use of a proxy group to develop a hypothetical capital structure where the use of the parent's capital structure would produce anomalous results.

223. Staff agrees with the cost of debt proposed by Anadarko/Tesoro. Staff states that although the State calculated the cost of debt using the weighted average embedded cost of debt of the Carriers parents, the variations are insignific t. However, Staff asserts that the record does not support the use of parent company debt costs because the Carriers' parents have materially different risk profiles and capital structures than TAPS. Staff states that as with the determination of the TAPS equity return, it is also appropriate here to utilize a proxy group of risk-comparable pipeline companies to determine the cost of debt for TAPS. Moreover, Staff claims that as a matter of policy, the debt cost should be in synch with the capital structure. It follows that where the use of parent company capital structures is inappropriate and unreasonable, ascribing the parents' cost of debt to TAPS is likewise unreasonable. Staff states that the Carriers' arguments must be rejected because it is inappropriate to apply the Carriers' parents' capital structures to TAPS and, thus, using the parents' cost of debt for TAPS is precluded.

Discussion/Findings

224. The parties agree that Commission precedent mandates that the cost of debt be consistent with the capital structure. As discussed above, it was found that the Carriers' parents' capital structures are anomalous and cannot be used. The hypothetical capital structure was adopted and, thus for the sake of consistency, the cost of debt will be of the same design as the capital structure implemented in this decision. Staff, Anadarko/Tesoro, and the Carriers all cite *Enbridge Pipelines*, 100 FERC ¶61,260 at 61,944 (2002) and *Michigan Gas Storage Co.*, 87 FERC ¶ 61,038 at 61,166 (1999) for the proposition that the capital structure imputed to a pipeline should also be imputed to the cost of debt.[168] Thus, they all agree (whether or not

[168] *Enbridge*, 100 FERC at 61,944 ("wh n the Commission imputes the capital structure of a corporate parent to a subsidiary, it also imputes the parent's costs of debt and preferred stock to the subsidiary"); *Michigan Gas Storage Co.*, 87 FERC ¶ 61,038

they agree with the final outcome of the capital structure findings) that this is the appropriate result. Staff IB at 78; RB at 64; Carriers' RB at 69; IB at 92; A/T IB at 91; RB at 72. Accordingly, it is found that the cost of debt will be calculated in accordance with the findings concerning capital structure.

225. As a result of all the findings above on Issue III. F. or the appropriate return on investment, it is concluded that the weighted cost of capital in this case is 7.20 percent in 2005[169] and 7.16 percent in 2006.

Issue III. G. What is the appropriate income tax allowance?

226. The parties agree that this issue is derivative of other issues. Accordingly, this issue is not in dispute. *See* A/T IB at 92; Carriers' IB at 94; Staff IB at 78.

Issue III. H. What level of throughput is appropriate to use in developing rates?

227. The parties have agreed to accept the Carriers' estimated throughputs for 2005 and 2006, accordingly, this issue is not in dispute. *See* A/T IB at 92; Carriers' IB at 94; Staff IB at 78. The Carriers' throughput figures are found in Exhibits 37-41, Statement A2 and Workpaper1 for 2005 and Exhibits 90-94, Statement A2 and Workpaper 1 for 2006.[170]

Issue III. I. What cost allocation and rate design is appropriate?

228. This issue is not in dispute. *See* A/T IB at 92; Carriers' IB at 94; Staff IB at 78.

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at 61,166 (1999) ("when the Commission imputes the capital structure of a corporate parent to a subsidiary, it also will impute the parent's costs of debt and preferred stock").

[169] Exs. A/T-13, WP1; A/T-144, WP1.

[170] Ex. A/T-146, WP1.

Issue III. J. Does the Designated TAPS Carriers' SAC presentation show that the filed 2005 and 2006 interstate rates are just and reasonable?

Parties' Contentions

229. The Designated TAPS Carriers (the Designated Carriers)[171] propose the stand alone cost (SAC) methodology as an additional benchmark to show that their filed rates are just and reasonable. The Designated Carriers claim that if their filed rates are lower than the rates determined under SAC, that will serve as an additional indicator that the Carriers' filed rates are just and reasonable. Precedent from the D.C. Circuit, the Supreme Court, other commissions, and this Commission support the use of SAC to evaluate the reasonableness of TAPS rates, the Designate Carriers claim. The Designated Carriers state that the average rate derived by Mr. Klick for all New Alaska Pipeline System (NAPS) is $5.34 per barrel in 2005 and $5.52 per barrel in 2006. Since these rates are higher than the Carriers' filed rates for 2005, the Designated Carriers claim that this proves the filed rates are just and reasonable.

230. In addition, the Designated Carriers assert that SAC acts as a surrogate for competition by replicating the competitive market in situations where competition is absent and enables regulators to determine the maximum rate a carrier could charge if competition existed. In sum, the Carriers state that SAC shows the rates that could be charged if TAPS was subject to effective competition. Thus, the Designated Carriers contend, the SAC analysis determines the maximum rate that an economically efficient new entrant could charge for the same service. If the SAC rate is higher than the filed rate, the Designated Carriers assert, then the filed rate is deemed just and reasonable.

231. The Designated Carriers state that they are not using SAC to establish the Carriers' rates. The Designated Carriers claim that it is irrelevant that SAC is not an original cost methodology because the Commission is not required to adhere exclusively to original cost ratemaking. Revenue adequacy principles are not important, the Designated Carriers argue, since they are not arguing that the SAC rates should be submitted for their filed rates.

232. Anadarko/Tesoro state that the SAC does not support the justness and reasonableness of the Designated Carrier's filed rates. SAC is a form of a replacement cost method grounded in hypothetical costs of operating a hypothetical

[171] The Designated TAPS Carriers are: BP Pipeline (Alaska); Exxon Mobile Pipeline Company; Koch Alaska Pipeline Company, LLC and Unocal Pipeline Company.

pipeline and contradicts the original cost method required by *Farmers Union II* and Opinion 154-B. First, Anadarko/Tesoro state that the SAC is fundamentally inconsistent with original cost ratemaking because it fails to take any actual costs of TAPS into consideration. Anadarko/Tesoro state that the SAC is a replacement cost valuation methodology that has been repeatedly rejected by the courts and the Commission. According to Anadarko/Tesoro, SAC is an allocation methodology used to allocate a total revenue requirement among competitive and noncompetitive services. The Designated Carriers incorrectly use SAC to justify their revenue requirement Anadarko/Tesoro claim. Anadarko/Tesoro also claim that the Designated Carriers SAC presentation is unreliable because even the hypothetical pipeline is substantially different from TAPS. The SAC is incapable of distinguishing among rates lower than the SAC ceiling rate, Anadarko/Tesoro contend. Anadarko/Tesoro state that the case law cited by the Designated Carriers misstates relevant precedent and that the SAC analysis has not been used or recognized by the Commission.

233. Staff agrees with Anadarko/Tesoro and also states that the Designated Carriers' SAC proxy is deficient and does not support a finding that the filed rates are just and reasonable. Staff presents many of the same arguments as Anadarko/Tesoro concerning SAC including that it ignores front loaded accumulated depreciation and all other actual costs. First, Staff states that the SAC is inconsistent with original cost ratemaking as adopted in Farmers Union II and Opinion 154-B and should be rejected. Staff claims that SAC does not make an assessment as to the justness and reasonableness of the individual TSM elements and only evaluates the overall rate and thus fails to satisfy the requirement that all non-cost elements of the TSM be justified. The Designated Carriers have not supported the SAC they advance and the SAC does not support the Carriers' filed rates, Staff claims. Second, Staff asserts that SAC is premised on replacement costs principles rejected by the Commission and the courts. Third, Staff states that the SAC is inappropriately used by the Designated Carriers to establish a purported new revenue requirement. The Commission has specifically rejected the use of SAC to set an overall revenue requirement, Staff states. SAC, Staff contends, may have some value as an allocation method however, the Designated Carriers are using SAC to assess the reasonableness of their rates and not simply to provide a benchmark. Finally, Staff states that the Designated Carriers' arguments stating that SAC should be applied to alleviate concerns about generational equity should carry no weight.

Discussion/Findings

234. As Staff correctly points out, the SAC methodology was primarily used by the Interstate Commerce Commission and its successor agency the Surface Transportation Board to allocate costs between captive and non-captive customers of coal-hauling railroads. *See* Staff IB at 86 n. 271. This methodology attempts to

determine the rate that a shipper would pay if the market were competitive by calculating the costs of a hypothetical pipeline. Carriers' IB at 94; A/T IB at 94.

235. As a threshold matter, it is noted that this initial decision has already found above that *Farmers Union II* and Opinion 154-B are the applicable ratemaking standards in this proceeding. Thus, this issue can easily be disposed of using the basics set forth in these two precedents. As discussed, *supra*, in Issue II.B, *Farmers Union II* provided the Commission with several "guideposts" to use in setting just and reasonable rates. *See Farmers Union II*, 734 F.2d at 1530. Under the original cost methodology articulated in Opinion 154-B, the Commission stated that "original cost is a 'proven alternative'" and "is the best yardstick" to use in determining revenue requirements. 31 FERC at 61,833. In addition, Opinion 154-B stated that "oil pipeline rates as a general rule must be cost-based." *Id.* SAC runs afoul of the cost-based principles established in Opinion 154-B.

236. The SAC is based only on forward-looking costs and does not take the original cost of the rate base into consideration.[172] This methodology fails to take any cost into consideration including actual accumulated depreciation and the original cost of rate base and starts from scratch to create a "different rate base, different expenses, different everything." Overcast, Tr. 6272-6273. As noted by Anadarko/Tesoro, the SAC ignores the accelerated depreciation already collected by the Carriers that has resulted in a 97% recovery of their original cost investment in TAPS. A/T IB at 95-96; Ex.A/T-33; Ex. A/T-35. Moreover, implementing costs derived under SAC would permit the Carriers to cover costs completely unrelated to their original investment in TAPS. A/T IB at 95; Ex. A/T-79 at 31-32. Contrary to the Carriers' assertions, Dr. Overcast states that "SAC cannot be used to test the revenue requirement because it does not reflect any of the elements of the total revenue requirement calculation as is required under the regulatory model."[173] Even the Carriers' witness Dr. Baumol agrees that SAC "has nothing to with the revenue requirements" and [a]s one of the inventors of the concept, I can guarantee you that that is not its purpose." A/T IB at 100 (quoting Tr. 3588). Thus, the Carriers' witnesses also agree that SAC cannot be used to determine just and reasonable rates. A/T IB at 101. Anadarko/Tesoro also point out that no witness knew of a case where an agency used SAC to determine the total revenue requirement.[174] Dr. Baumol, the methodology's originator, admitted

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[172] Overcast, Tr. 6272-2673; Ex. A/T-93at 17, 24-26, 28; Ex. A/T-78 at 60-62, 65-66; Ex. A/T-140 at 14-15; A/T at 28,29-34; DTC-1 at 16; DTC-2 at 10; DTC-5 at 11-12; DTC-36 at 14.

[173] A/T-93 at 24. In addition, Dr. Baumol stated that the SAC computes a competitive ceiling; however, it does not determine what the competitive rate should be. Tr. 3612.

[174] *See* A/T IB at 100 (citing Klick, Tr. 3444, Tr. 3467; Overcast, Ex. A/T-93 at

RECORDS CERTIFICATION

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Stan Hubbard

Signature of Camera Operator

6/8/2009

Date

Certification Rev. 7/98

6/7/07 TAPS TARRIFF PROCEED-INGS, & OIL PIPELINE INTEGRITY & CORROSION (FILE 2)

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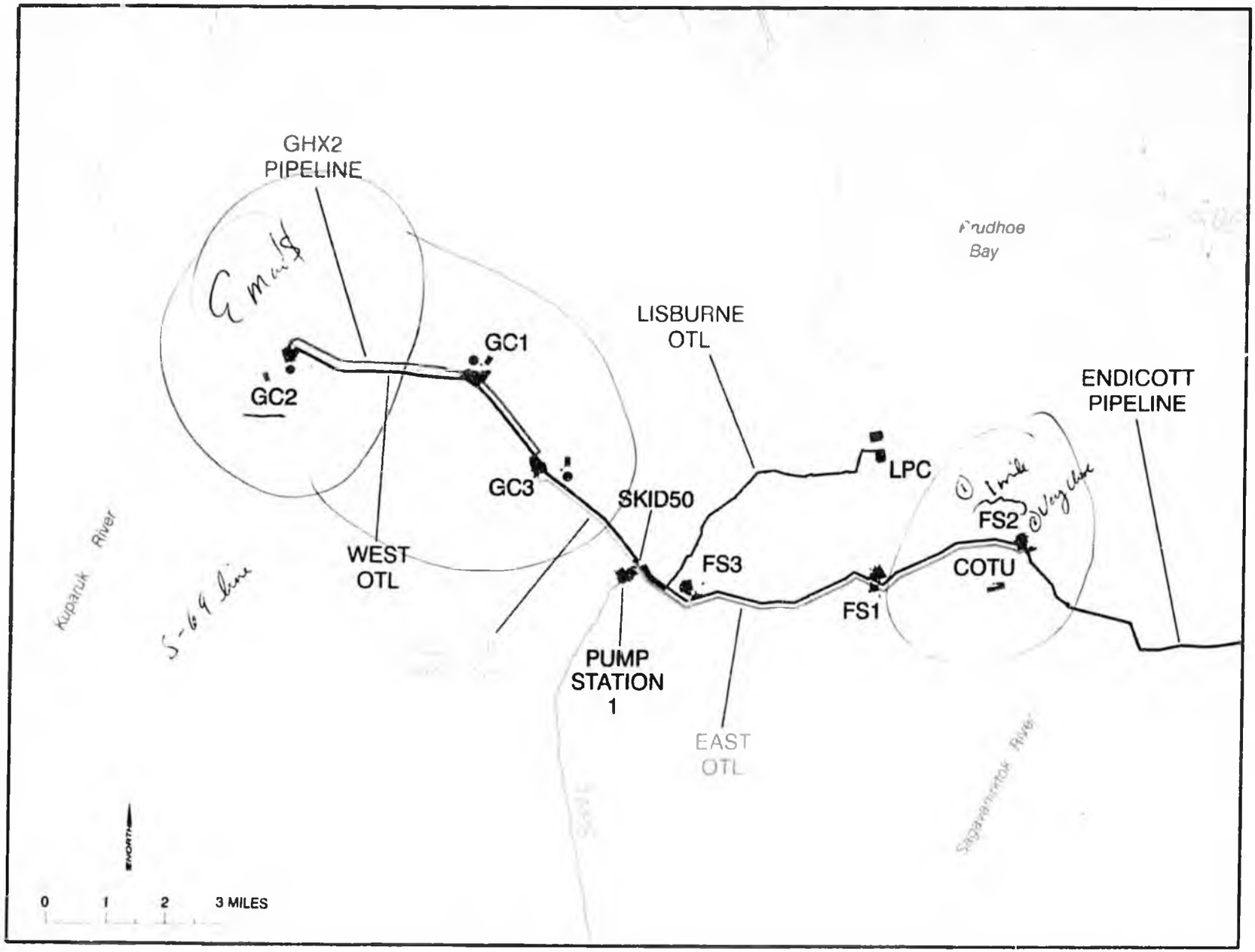
BP Alaska update to the House Resources Committee

June 7 2007

Prudhoe Bay Orientation



BPXA Cartography/10.18.06/pe15382.dgn

CORRECTION

THE FOLLOWING DOCUMENT(S)
HAVE BEEN REFILMED TO
ASSURE LEGIBILITY OR PAGINATION

BP Alaska update to the House Resources Committee

June 7 2007

Agenda

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August 2006 Business Resumption

- Cleanup and recovery
- Bypass construction
- Listening and learning

Operations Integrity Assurance

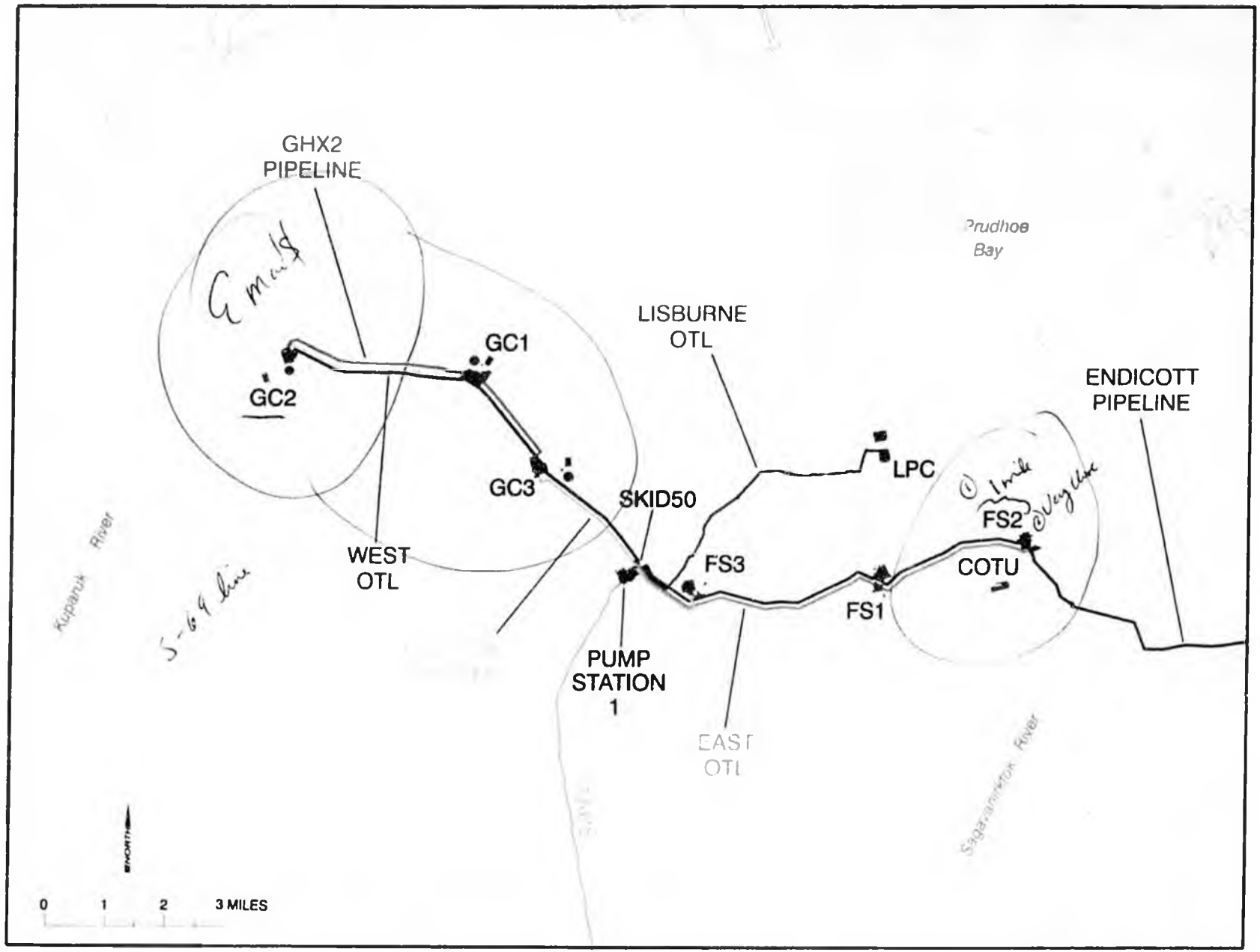
- Corrosion management
- Ongoing inspection and surveillance

Pipeline Renewal

- OTL system project
- Leak detection

BPX Alaska Forward Plan

Prudhoe Bay Orientation



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Business Resumption Program

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In 100 days:

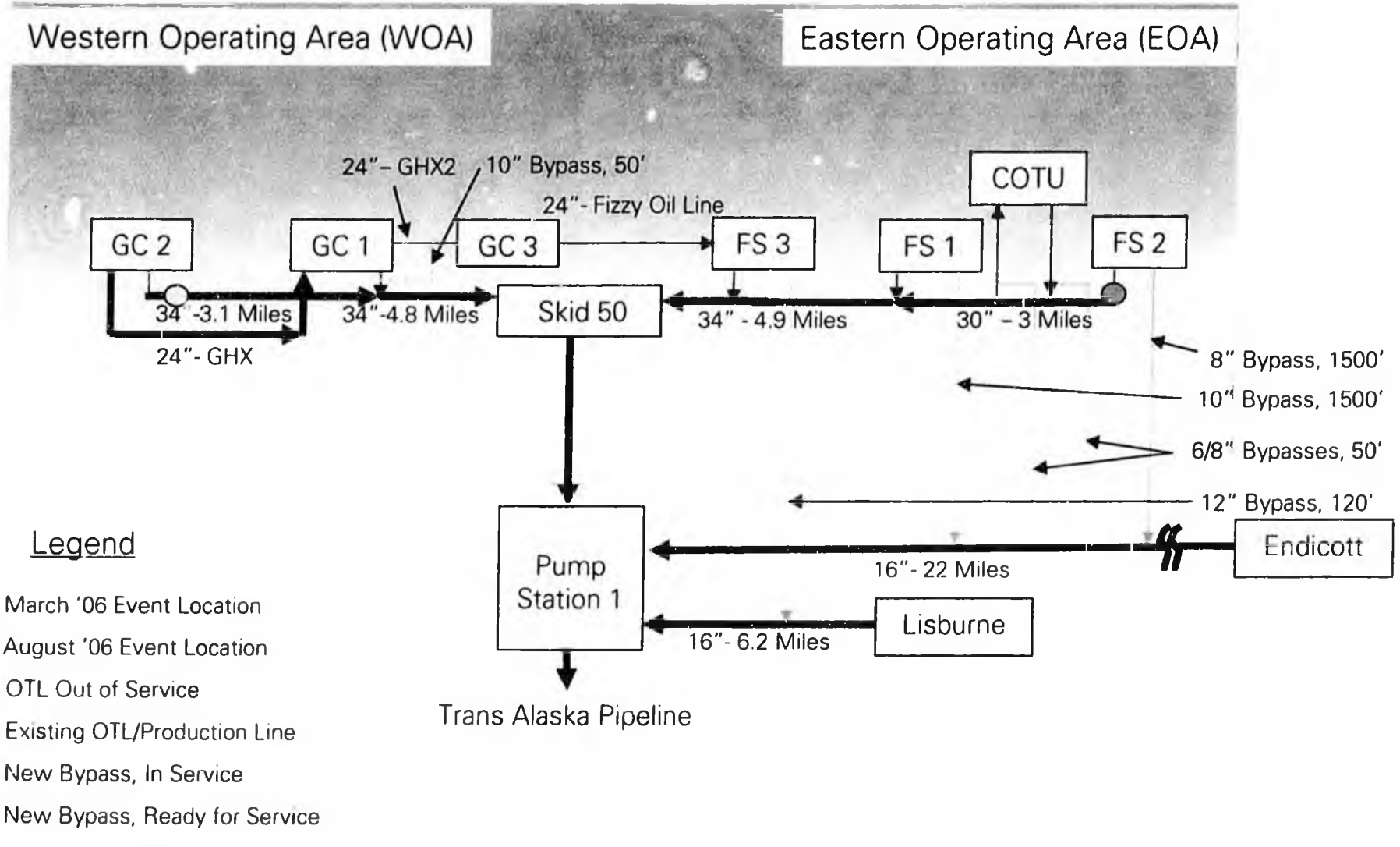
- Removed insulation, inspected and re-insulated over **43,000 ft (8 miles)** of oil transit lines (inc. 4 caribou and 2 road crossings)
- Installed **5 new pipeline bypass** projects
- Completed **34 hot taps**
- De-oiled and fully isolated GC2 to GC1 and FS2 to FS1 OTLs in preparation for abandonment
- Built and installed a new temporary 34 "pig launcher at GC1 and solids bypass facilities at skid 50 to enable WOA and EOA OTL pigging
- **Ran 6 cleaning, 1 gauge and 2 smart pigs** through the FS1 to skid 50 EOA OTL to determine suitability to remain in service until the lines can be replaced. Began weekly maintenance pigging
- **Ran 6 cleaning, 1 gauge and 2 smart pigs** through the GC1 to skid 50 WOA OTL to determine suitability to remain in service until the lines can be replaced. Began weekly maintenance pigging
- Restarted FS2 and COTU through the Endicott pipeline
- Provided contingency routing for oil export to PS1 from 4 other facilities

Business Resumption Program (continued)

In 100 days:

- Received all necessary regulatory permits and commercial agreements without any impact to schedule
- Removed 40 ft section of GC2 to GC1 OTL and shipped to L48 for further sectioning and analysis by DOJ
- Increased North Slope camp population supporting GPB by **700 (44%)**
- Shutdown and restarted **7 major production facilities** (some twice). Partially shutdown and restarted the gas plants
- January 2007 production >430mbd

North Slope Oil Transit Lines - Bypasses



East/West Operating Area Bypass Status

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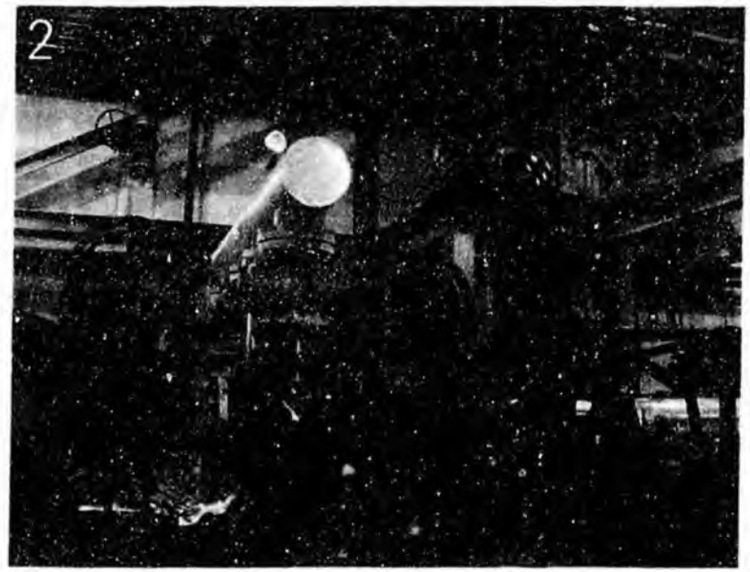
Production Facility	Bypass Status	Comments
EOA Flow Station 2 (FS2)	Fully Operational. In Service to Endicott.	
EOA Crude Oil Topping Unit (COTU)	Fully Operational. In Service to Endicott.	
EOA Flow Station 1 (FS1)	Ready to Be Placed Into Service to Endicott. Requires Valve Installation & Final Tie-in for Use.	2 day Shutdown Required. Estimated Duration to Commission – 5 days.
EOA Flow Station 3 (FS3)	Ready to Be Placed Into Service to Lisburne. Requires Spool & Final Tie-in for Use.	Estimated Shutdown & Commissioning Duration – 7 days.
WOA Gathering Center 2 (GC2)	Fully Operational. In Service through GHX to GC1.	Installed Following the March OT21 Event
WOA Gathering Center 1 (GC1)	Ready to Be Placed Into Service to GHX2. Requires Spool & Final Tie-in for Use.	Estimated Shutdown & Commissioning Duration – 5 days.
WOA Gathering Center 3 (GC3)	Slug Catcher Bypass Ready to be Placed Into Service. Requires Spool Final Tie-in for Use.	

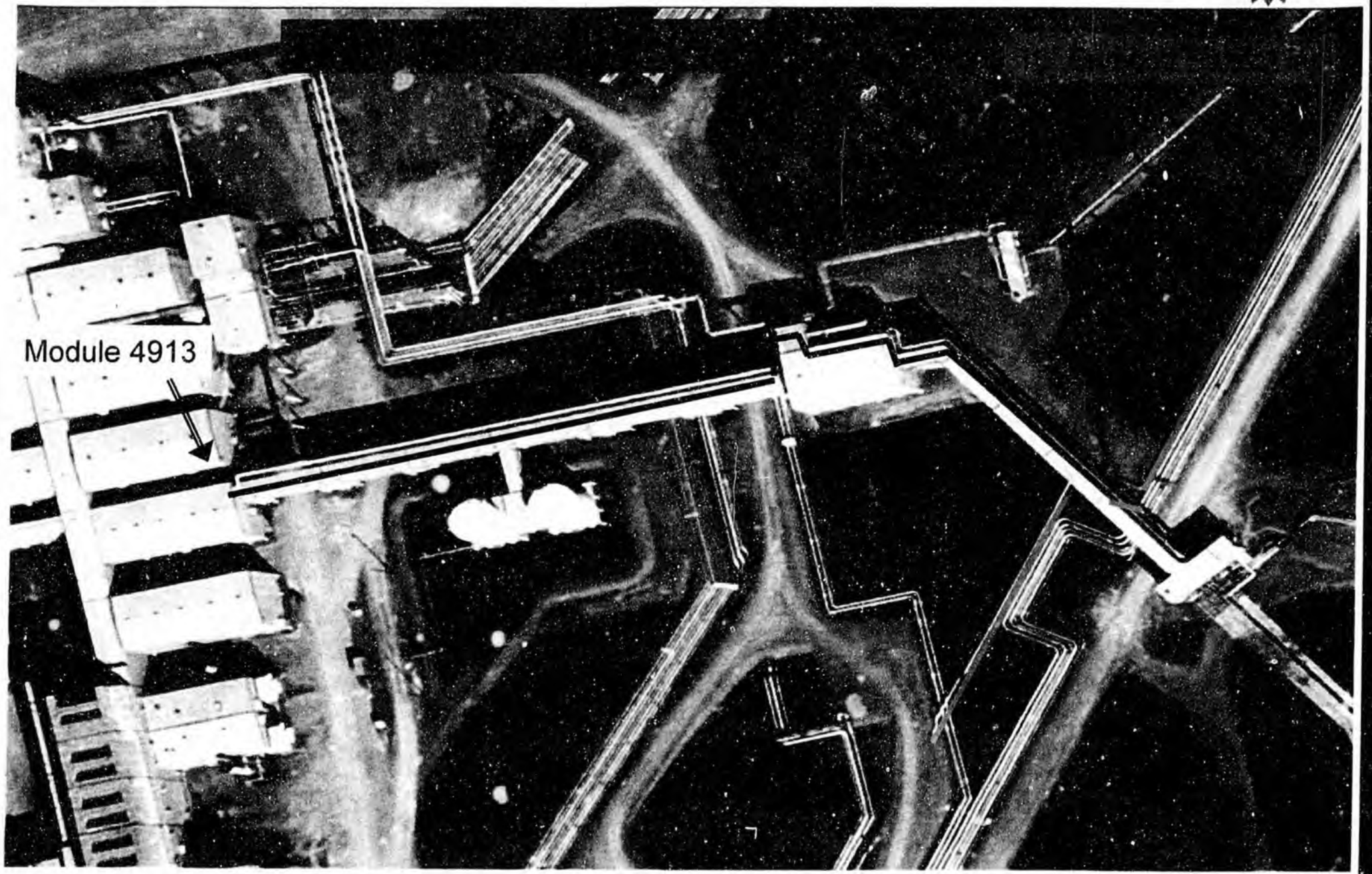
GPB Bypass Photographs



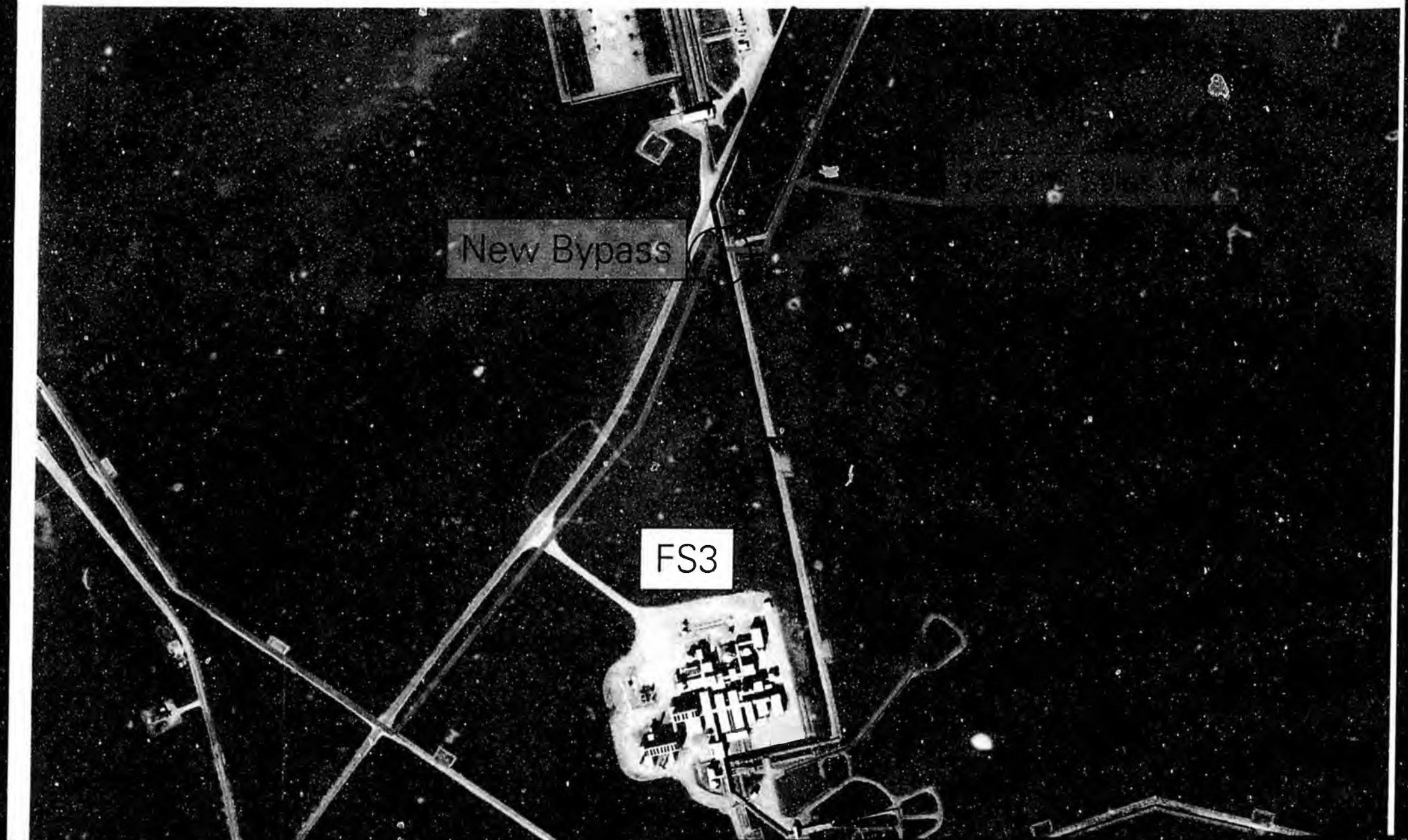
Legend

- 1 – Hot Tap to Endicott for FS2 Bypass
- 2 - FS1 Bypass Piping in the Module
- 3 – FS1 Bypass Piping Installation Outside FS1

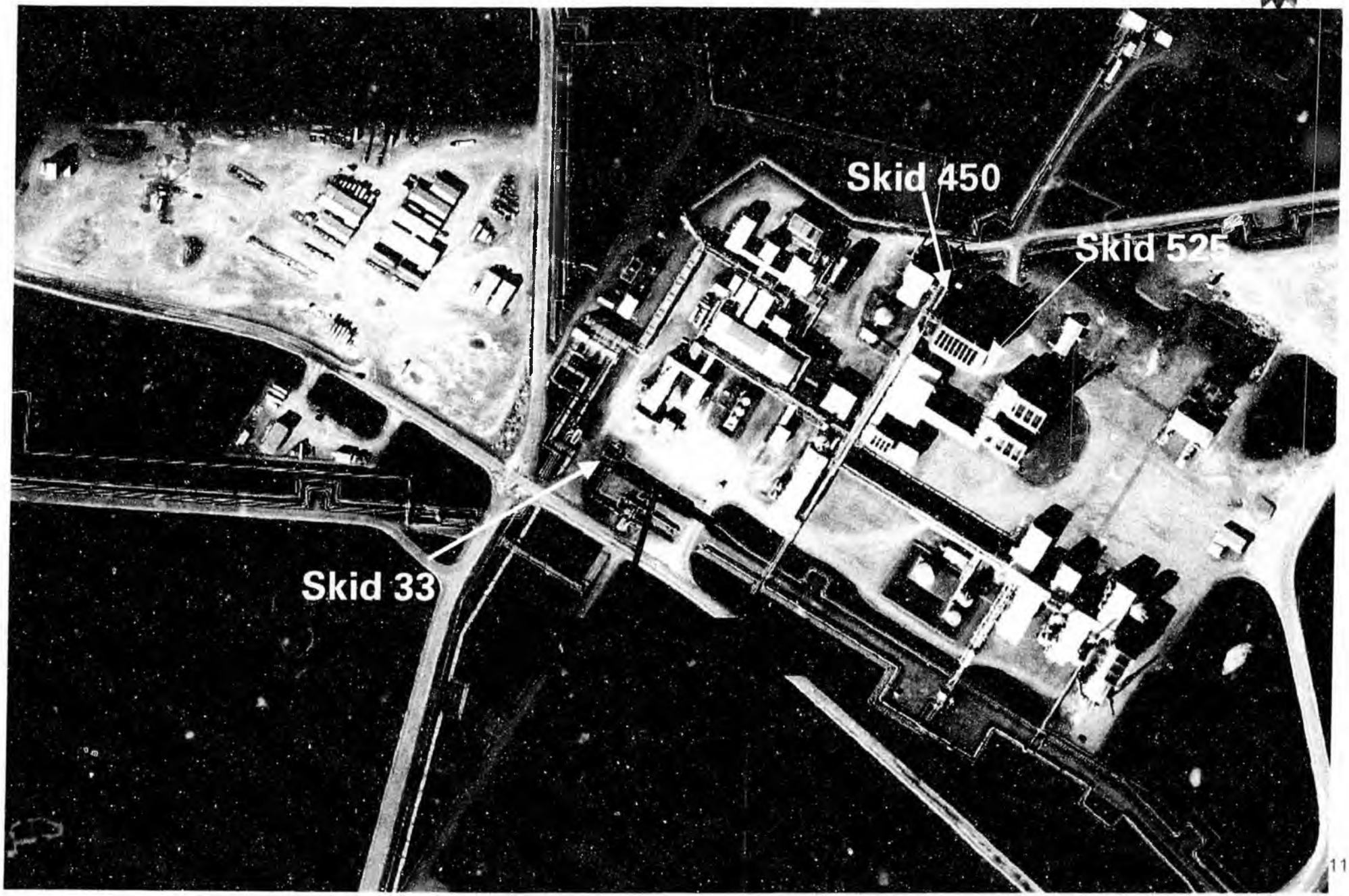
FS1 Bypass Option



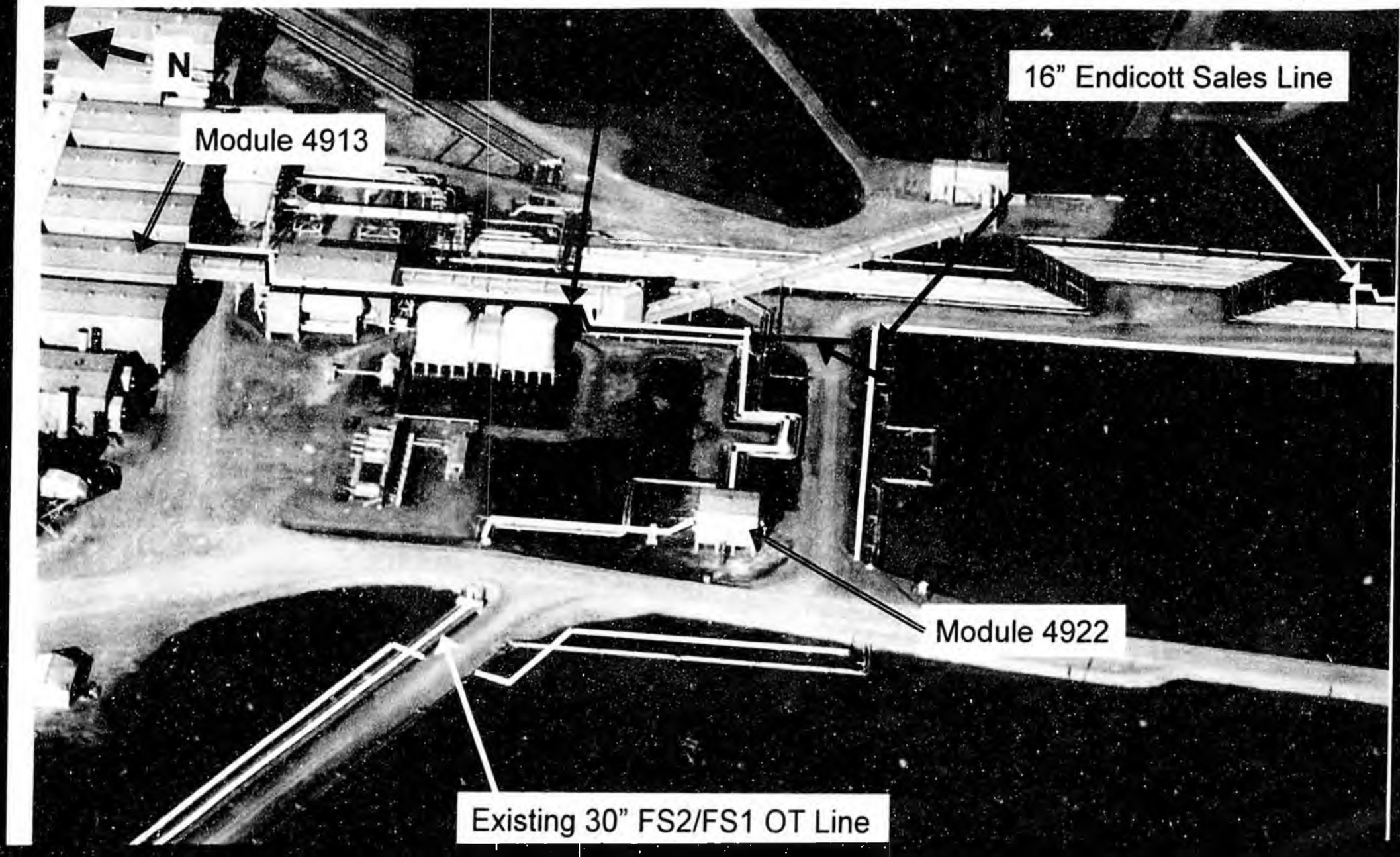
FS3 Bypass to Lisburne Pipeline



GC-1 Bypass Overview



FS2 Bypass to Endicott Pipeline



Listening and Learning

• Restore GPB production safely but swiftly	• Restored production in 44 days and production now at pre-August Shutdown rates of > 440MBOED
• Seek to understand why this system failed (Corrosion mechanism)	• Extensive technical evaluations undertaken to determine failure mechanisms but 3 clear causal factors now understood, sediments, water and flow velocities .These factors allowed microbial inducted corrosion (MIC) to occur, we will continue further studies to define the identification of the specific types of bacteria
• Begin immediate maintenance pigging and "Intelligent" pigging of Transit lines	• Mechanical pigging weekly now and all OTL lines intelligent pigged twice
• Include all Oil transit Lines in DOT's Pipeline Integrity Management Program	• Working with DOT, phase 1 transition of all lines (except 1 NGL line by 03/08) have been incorporated into the DOT Pipeline Integrity Management Program
• Change BP's Alaska organization to create an independent Technical Directorate	• Technical Directorate formed in Aug, 2006 with more than 150 technical staff working outside of the line organization to provide independent integrity assurance.
• Identify and accelerate maintenance spending across operations	• Maintenance spending has been increased 4 fold since 2004 to c.a. $195mm in 2007
• Work openly with Federal, State and Industry to identify learning's and best practices	• Tremendous efforts, recognized by many of the agencies and industry to openly share and incorporate ideas, processes and learning's to mitigate future risks

Operations Integrity Assurance

Inspection and Surveillance

Corrosion Mitigation Program Status

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Mechanisms

- External investigation identified Microbiological Influenced Corrosion (MIC) as primary cause
- 3 causal factors are water, sediment and bacteria.
  - These factors are now mitigated and we are confident in the ongoing integrity of these lines

Corrosion Mitigation Strategy

- Carbon Dioxide: Continuous corrosion inhibitor
- Stagnant water &/or sediments: Remove using maintenance pigs
- Bacteria: Scraping pipe walls (pigs) & using biocide
  - Cl is also a biocide

Status

- Pipelines were cleaned prior to ILI
- Weekly & monthly cleaning pigs
- Supplemental corrosion inhibitor injection directly into OTLs
- Analysis of pigging returns - virtually no deposits recovered since cleaning

Inspections

- 23,804 Inspections now completed since August 6
- Repeat Ultrasonic inspections over areas of known corrosion
- Repeat smart pig runs scheduled for summer 2007 for EOA/WOA pipelines (XF21 completed 6/5)

Inspection Accelerated Integrity Assurance

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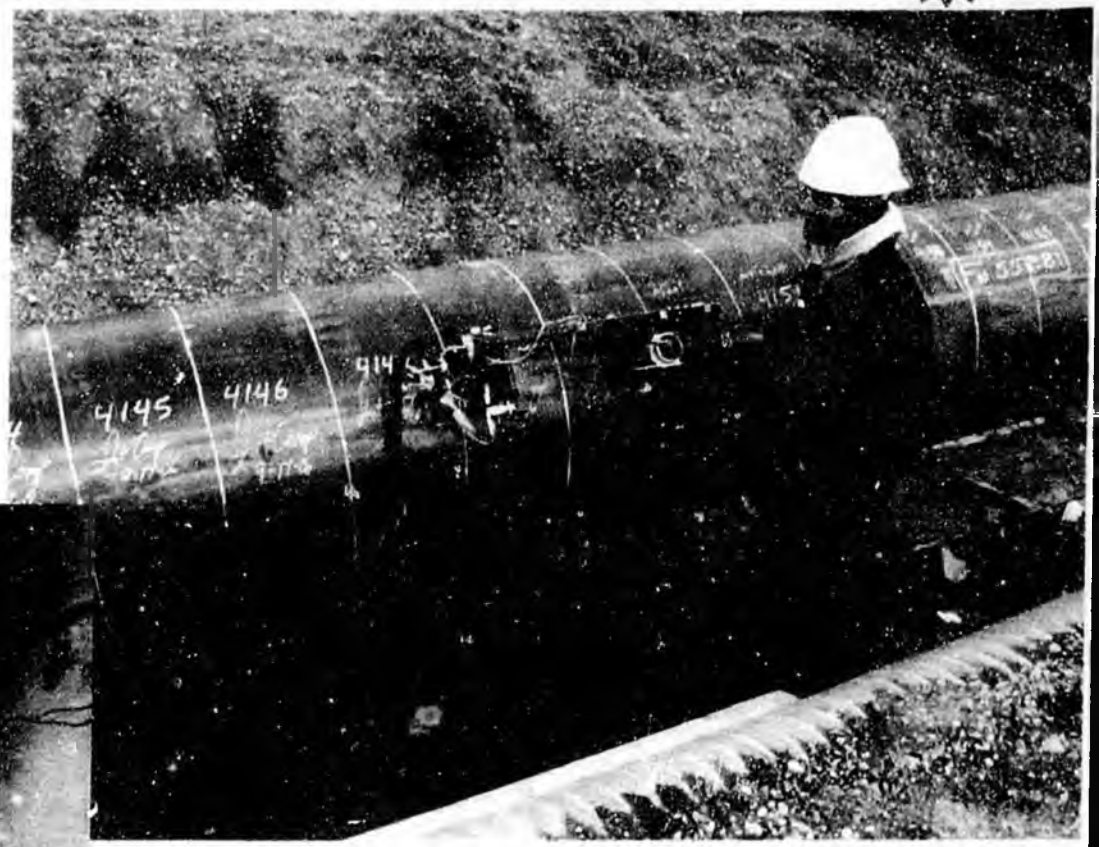
Ultrasonic testing of 34" transit line between FS1 and skid 50



Automatic ultrasonic testing of 34" transit line between GC1 and skid 50