

Exhibit No. AT-1
Witness: Barry E. Sullivan

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

BP Pipelines (Alaska) Inc.

Docket No. IS09-348-004, *et al.*

STATE OF ALASKA
THE REGULATORY COMMISSION OF ALASKA

In the Matter of the Tariff Rate Revision, Designated)
as TL131-301, Filed by CONOCOPHILLIPS)
TRANSPORTATION ALASKA, INC. for Revised) P-08-9, *et al.*
Rates Pertaining to the Trans Alaska Pipeline System)

PREPARED DIRECT TESTIMONY
OF
BARRY E. SULLIVAN

ON BEHALF OF
ANADARKO PETROLEUM CORPORATION,
TESORO CORPORATION, AND TESORO ALASKA COMPANY

~~**FILED UNDER SEAL**~~
~~**TESTIMONY MAY CONTAIN CONFIDENTIAL PROTECTED MATERIALS**~~
~~**AND/OR HIGHLY CONFIDENTIAL PROTECTED MATERIALS**~~

February 18, 2011

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TABLE OF ABBREVIATIONS

Alyeska	Alyeska Pipeline Service Company
Anadarko	Anadarko Petroleum Corporation
ANS	Alaska North Slope
BPPA	BP Pipelines (Alaska) Inc.
BPXA	BP Exploration (Alaska) Inc.
Carriers or TAPS Carriers	BP Pipelines (Alaska) Inc. ConocoPhillips Transportation Alaska, Inc. ExxonMobil Pipeline Company Koch Alaska Pipeline Company, L.L.C. Unocal Pipeline Company
DD&A	Depletion, depreciation, and amortization
FERC or Commission	Federal Energy Regulatory Commission
HHI	Herfindahl-Hirshman Index
mmboe	Million Barrels of Oil Equivalent
Oil Pipeline Policy Statement	18 CFR Part 348, ¶ 31,177, Order No. 572, <i>Market-Based Ratemaking for Oil Pipelines</i> (1994)
RCA	Regulatory Commission of Alaska
SARB	[Alaska] State Assessment Review Board
SORP	Statement of Recommended Practice
SR	Strategic Reconfiguration
State	State of Alaska
TAPS	Trans Alaska Pipeline System
Tesoro	Tesoro Corporation and Tesoro Alaska Company

**SUMMARY OF
PREPARED DIRECT TESTIMONY OF
BARRY E. SULLIVAN
ON BEHALF OF
ANADARKO PETROLEUM CORPORATION,
TESORO CORPORATION, AND TESORO ALASKA COMPANY**

1 Barry E. Sullivan has a B.A. degree in Economics from the University of
2 Massachusetts at Boston. He also attended the University of York, England, in
3 connection with graduate work in economics. Mr. Sullivan is the President of
4 Brown, Williams, Moorhead & Quinn, Inc., an energy consulting firm that
5 provides comprehensive energy-related services to hundreds of clients, including
6 electric, natural gas and oil pipeline companies, local gas distribution companies,
7 gas producers, marketers, shippers, cogeneration developers, trade associations,
8 and federal and state agencies.

9 Prior to his employment with Brown, Williams, Moorhead & Quinn, Inc.,
10 Mr. Sullivan was employed at the Federal Energy Regulatory Commission
11 ("FERC" or "Commission") for over 26 years, beginning in March 1979 and
12 ending in September 2005. He worked in the litigation section, at first in the
13 Office of Pipeline and Producer Regulation and later in the Office of
14 Administrative Litigation. Mr. Sullivan's last position with the FERC was as a
15 supervisor in the Division of Technical Analysis in the Office of Administrative
16 Litigation where he supervised, directed, and sponsored testimony in a significant
17 number of oil pipeline, natural gas pipeline, and electric utility proceedings set for
18 formal litigation at the FERC. These complex proceedings concerned oil pipeline

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1 costs of service, oil pipeline rates, market power, cost allocation and rate design
2 issues, engineering issues, electric generation interconnection, and gas quality
3 issues.

4 Mr. Sullivan testifies concerning the merits of the State of Alaska's
5 ("State") prudence challenge to the Strategic Reconfiguration ("SR") project on
6 the Trans Alaska Pipeline System ("TAPS"). While Mr. Sullivan's Prepared
7 Direct Testimony concerns prudence issues, Anadarko anticipates he will sponsor
8 answering testimony concerning issues related to the cost of service, including
9 impacts of SR.

10 Mr. Sullivan confirms that the prudent-manager standard addressed in
11 Dr. Makholm's testimony is consistent with his understanding of the standard to
12 be applied by the FERC and the Regulatory Commission of Alaska ("RCA") in
13 evaluating the SR project. Mr. Sullivan concludes that, in his professional
14 judgment, the State has demonstrated that under the prudent-manager standard the
15 Carriers acted imprudently in virtually all phases of planning and executing the
16 SR Project. Based upon his review of the State's testimony and exhibits, he
17 agrees with Dr. Makholm that there were four aspects of Alyeska Pipeline Service
18 Company's ("Alyeska") and the TAPS Carriers' behavior that were imprudent:
19 (1) poor governance; (2) failure to respond to the lack of lump-sum contracts;
20 (3) incomplete analysis and the decision to proceed with such a large project
21 based on incomplete and evidently faulty analysis; and (4) poor implementation

1 of the project. On each aspect, Mr. Sullivan identifies the testimony and exhibits
2 that were most persuasive to him.

3 Mr. Sullivan testifies that the Carriers and their affiliates are vertically
4 integrated and dominate a highly concentrated market for oil production and
5 transportation from the Alaskan North Slope (“ANS”). Mr. Sullivan reviews
6 prior testimony and decisions from other courts and regulators in drawing his
7 conclusion that the Carriers and their affiliates are vertically integrated. He also
8 quantifies the market concentration for market transportation, through his use of
9 the Herfindahl-Hirshman Index (“HHI”), as suggested by FERC in its oil pipeline
10 policy statement. From these analyses, he concludes that, in applying the
11 prudence standard to the SR project, the FERC and the RCA should take into
12 consideration these unique circumstances. In particular, he testifies that the
13 FERC and the RCA should consider that the Carriers’ investment decisions
14 relating to the SR project were grounded, in large part, upon an “integrated”
15 analysis of the benefits of the SR project to their affiliated companies. As such,
16 he concludes that decisions grounded in affiliated benefit merit a heightened
17 regulatory review and strict application of the prudent-manager standard to the
18 degree those decisions were for the benefit of their affiliated companies.

19 Mr. Sullivan testifies that the Carriers’ decisions to push forward without
20 the proper evaluation of alternatives and on an expedited schedule form a good
21 example of the Carriers’ tainted decision process. Specifically, he concludes that
22 the Carriers’ decisions to push forward without the proper evaluation of

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1 alternatives and on an expedited schedule were based in part upon their effort to
2 realize benefits for their affiliated entities that are unrelated to providing service
3 to shippers. Mr. Sullivan identifies three such benefits that the Carriers' affiliates
4 would obtain by accelerating SR: (1) the affiliates would recognize expiring tax
5 benefits on affiliated, consolidated tax return; (2) the affiliates would be able to
6 "book" additional ANS reserves; and (3) the affiliates would, through booking
7 additional reserves, be able to reduce their allowance for depletion, depreciation,
8 and amortization.

9 Finally, Mr. Sullivan explains that there is also a tension between the
10 Carriers' positions before the FERC and the RCA and their positions before the
11 taxing authorities in Alaska. He testifies that, for ad valorem tax purposes, the
12 Carriers have suggested that the current capacity of TAPS based on the SR project
13 is unnecessary to provide current or future service while, for rate purposes, the
14 Carriers have suggested that all of their investment in providing and maintaining
15 the current capacity of TAPS is prudent and should be recovered from their
16 ratepayers. From this, he concludes that, judging from a prudence perspective
17 alone, a prudent manager would not develop and maintain capacity at a greater
18 cost than would add value or than could reasonably be expected to be necessary to
19 provide service.

PREPARED DIRECT TESTIMONY OF
BARRY E. SULLIVAN
ON BEHALF OF
ANADARKO PETROLEUM CORPORATION,
TESORO CORPORATION, AND TESORO ALASKA COMPANY

1 **I. INTRODUCTION**

2 **Q1. Please state your name, business address, and occupation.**

3 A1. My name is Barry E. Sullivan, and I am the President of Brown, Williams,
4 Moorhead & Quinn, Inc.. My business address is 1155 15th Street N.W., Suite
5 400, Washington, D.C. 20005.

6 **Q2. Please briefly summarize your education and professional experience.**

7 A2. I am currently the President of Brown, Williams, Moorhead & Quinn, Inc., which
8 is an energy consulting firm that provides comprehensive energy-related services
9 to hundreds of clients, including electric, natural gas and oil pipeline companies,
10 local gas distribution companies, gas producers, marketers, shippers, cogeneration
11 developers, trade associations, and federal and state agencies.

12 Prior to my employment with Brown, Williams, Moorhead & Quinn, Inc. I
13 was employed at the Federal Energy Regulatory Commission (“FERC” or
14 “Commission”) for over 26 years, beginning in March 1979 and ending in
15 September 2005. During the entire time of my employment at the Commission, I
16 worked in the litigation section, at first in the Office of Pipeline and Producer
17 Regulation and later in the Office of Administrative Litigation.

18 My last position with the FERC was as a supervisor in the Division of
19 Technical Analysis in the Office of Administrative Litigation. I supervised,

1 directed, and sponsored testimony in a significant number of oil pipeline, natural
2 gas pipeline, and electric utility proceedings set for formal litigation at the FERC.
3 These complex proceedings concerned oil pipeline costs of service, oil pipeline
4 rates, market power, cost allocation and rate design issues, engineering issues,
5 electric generation interconnection, and gas quality issues. I have a B.A. degree
6 in Economics from the University of Massachusetts at Boston. I also attended the
7 University of York, England, in connection with graduate work in economics.

8 **Q3. Is this the first testimony you have filed in this consolidated docket?**

9 A3. Yes.

10 **II. PURPOSE OF TESTIMONY**

11 **Q4. What is the purpose of this direct testimony?**

12 A4. I was asked by Anadarko Petroleum Corporation (“Anadarko”), Tesoro
13 Corporation, and Tesoro Alaska Company (“Tesoro”) (collectively,
14 “Anadarko/Tesoro”) to evaluate and provide testimony concerning the merits of
15 the State of Alaska’s (“State”) prudence challenge to the Strategic
16 Reconfiguration (“SR”) project on the Trans Alaska Pipeline System (“TAPS”).
17 The SR project was undertaken by the joint owners of TAPS, referred to as the
18 TAPS Carriers (or “Carriers”).¹

¹ The TAPS Carriers are BP Pipelines (Alaska) Inc., ConocoPhillips Transportation Alaska, Inc., ExxonMobil Pipeline Company, Koch Alaska Pipeline Company, L.L.C., and Unocal Pipeline Company.

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1 While my testimony at this time concerns prudence issues, I note that at
2 the appropriate time, Anadarko/Tesoro anticipates filing answering testimony
3 addressing other rate issues raised by the SR Project.²

4 **III. EXHIBIT LIST**

5 **Q5. What exhibits are you sponsoring?**

6 A5. In addition to considering the exhibits identified by Mr. Brown in his testimony
7 on behalf of Anadarko/Tesoro, I have am sponsoring the following exhibits:

Ex. No.	Description	Date	Source/ Docket	Conf. Status
AT-1	Prepared Direct Testimony of Barry E. Sullivan	02/18/11	IS09-348-004, et al.	Highly Confidential
AT-2	Excerpts from SOA-1, Prepared Direct Testimony of Christopher J. Sullivan (30 pages)	01/21/11	IS09-348-004, et al.	Highly Confidential
AT-3	Prepared Answering Testimony of William H. Hieronymus (2 pages)	06/18/10	IS09-348-000, et al. Phase 1, Non-SR	Highly Confidential
AT-4	Transcript of Hearing before The Honorable Michael J. Cianci (25 pages)	10/29/10	IS09-348-000, et al. Phase 1, Non-SR	Highly Confidential
AT-5	Deposition Transcript of Charles J. Coulson (51 pages)	12/08/10	3AN-06-8446 CI (2007-09 Tax Yrs) (AK Super. Ct.)	Public
AT-6	Amended Decision Upon Reconsideration Following Trial De Novo (171 pages)	10/26/10	3AN-06-8446 CI (2006 Tax Year) (AK Super. Ct.)	Public
AT-7	Excerpt from Transcript of Hearing Before The Honorable Carmen A. Cintron (2 pages)	11/03/06	IS05-82-002, et al.	Confidential
AT-8	Table 1: Vertical Integration of TAPS Owners (1 page)			Public

² See, e.g., Protest, Motion to Intervene, Motion to Consolidate, and Request to Hold Proceedings in Abeyance of Anadarko Petroleum Corporation (filed June 23, 2009, Docket No. IS09-395) at 8-10; Protest, Motion to Intervene, Motion to Consolidate, and Request to Hold Proceedings in Abeyance of Anadarko Petroleum Corporation (filed June 18, 2009, Docket No. IS09-384) at 8-10.

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AT-9	Table 2: North Slope of Alaska Producing Oil Fields (1 page)			Public
AT-10	Excerpt from Prepared Direct Testimony of Charles J. Coulson (BPP-1HC) (3 pages)	04/16/10	IS09-348-000, et al. Phase 1, Non-SR	Highly Confidential
AT-11	Excerpt from Prepared Direct Testimony of Lisa J. Cameron (5 pages)	04/16/10	IS09-348-000, et al. Phase 1, Non-SR	Highly Confidential
AT-12	BP Pipelines, Inc. Memorandum re “highest possible tariff” (18 pages)	05/20/77	RCA Docket P-97-4; IS05-82-002, et al.	Public
AT-13	Email from A. Bolea to J. Haines Re: Minimum Throughput Study (2 pages)	11/08/04	BPPA2010-00379668-669	Confidential
AT-14	Midstream slides (3 pages)		BPPA2010-00127557-559	Confidential
AT-15	Supplemental Finance Memorandum, BPPA – Alaska BU, TAPS Electrification and Control System Lifecycle Replacement Project (10 pages)	09/06/05	BPPA2010-00441185-194	Highly Confidential

IV. SUMMARY OF MAJOR CONCLUSIONS

Q6. Please summarize your major conclusions.

A6. The prudent-manager standard addressed in Dr. Makhholm’s testimony is consistent with my understanding of the standard to be applied by the FERC and the RCA in evaluating the SR project. In my professional judgment, the State has demonstrated that the Carriers acted imprudently in virtually all phases of planning and executing the SR Project under the prudent-manager standard.

Importantly, the Carriers and their affiliates are vertically integrated and dominate a highly concentrated market for oil production and transportation from the Alaskan North Slope (“ANS”). This vertical integration provides a context for understanding and further supporting the imprudent conduct demonstrated by

1 the State. In applying the prudence standard to the SR project, the FERC and the
2 RCA should take into consideration these unique circumstances. In particular, the
3 FERC and the RCA should consider that the Carriers' investment decisions
4 relating to the SR project were grounded, in large part, upon an "integrated"
5 analysis of the benefits of the SR project to their affiliated companies. Such
6 decisions grounded in affiliate benefit merit a heightened regulatory review and
7 strict application of the prudent-manager standard to the degree those decisions
8 were for the benefit of their affiliated companies.³

9 The Carriers' decisions to push forward without the proper evaluation of
10 alternatives and on an expedited schedule form a good example of the Carriers'
11 tainted decisionmaking process. The State has shown that the Carriers' decisions
12 to push forward without the proper evaluation of alternatives and on an expedited
13 schedule were based in significant part upon their effort to realize expiring tax
14 benefits on an affiliated, consolidated tax return that would have no impact on
15 their shippers' rates. Effectively, the Carriers sacrificed a proper evaluation and
16 timetable for the SR project at great risk and cost to the efficient operation of
17 TAPS and to their shippers in order to realize expiring tax benefits on an
18 affiliated, consolidated tax return.

³ The Carriers' integrated web of affiliated interests are perhaps best understood by first understanding the reasons why the Carriers have attempted to maintain high rates on TAPS in the first instance. High TAPS rates maximize the net-back deduction from the Carriers' affiliated producers' royalty and severance tax obligations to the State, maximize their profit from independent shippers, and maximize their affiliated producers' competition position over their independent competitors.

1 Similarly, the Carriers’ decisions to continue the SR project once it
2 became obvious that it had not been properly vetted were based, in significant
3 part, on a concern for the “booked” ANS reserves of affiliated producers. In
4 essence, the Carriers’ affiliated producers were able to “book” additional ANS
5 reserves because the SR project permitted their affiliated producers to assume
6 lower operational throughput levels and an extended life for TAPS in their
7 economic modeling of ANS reserves. These additional “booked” reserves for
8 their affiliated producers were even referred to in internal memoranda as the
9 “prize” of the SR project. This affiliated concern was particularly egregious
10 because the Carriers’ affiliated producers have been the only ones able to realize
11 these alleged benefits. The Carriers continued to maintain for rate purposes that
12 the life of TAPS had not been extended by the SR project. Effectively, the
13 Carriers managed to increase the cost of transportation for independent producers
14 and shippers for the SR project while restricting significant alleged benefits of
15 that project to their affiliated producers.

16 There is also a tension between the Carriers’ positions before the FERC
17 and the RCA and their positions before the taxing authorities in Alaska. For ad
18 valorem tax purposes, the Carriers have suggested that the current capacity of
19 TAPS based on the SR project is unnecessary to provide current or future service
20 while, for rate purposes, the Carriers have suggested that all of their investment in
21 providing and maintaining the current capacity of TAPS is prudent and should be
22 recovered from their ratepayers. Judging from a prudence perspective alone, a

1 prudent manager would not develop and maintain capacity at a greater cost than
2 would add value or than could reasonably be expected to be necessary to provide
3 service.

4 In summary, the State has demonstrated that the Carriers acted
5 imprudently in virtually all phases of planning and executing the SR Project.
6 Moreover, the FERC and the RCA should review the Carriers' "integrated"
7 decisionmaking relating to the SR project under a heightened standard for
8 regulatory review to the degree they considered benefits to affiliated companies at
9 great cost and risk to independent producers and shippers such as
10 Anadarko/Tesoro.

11 **V. COMMENTS ON PRUDENCE OF THE SR PROJECT**

12 **A. The Prudence Standard**

13 **Q7. Do you agree with the prudence standard applied by Dr. Makholm to**
14 **evaluate the Carriers' SR project?**

15 A7. Yes. Dr. Makholm reviews the origin and history of the prudence standard
16 applied to regulated entities. He further explains the applicability of that standard
17 to TAPS. He concludes that the prudence standard set forth in *New England*
18 *Power Co.* is appropriate for use in this case.⁴

19 *New England Power Co.* states:

20 [W]e reiterate that managers of a utility have broad discretion in
21 conducting their business affairs and in incurring costs necessary
22 to provide services to their customers. In performing our duty to

⁴ Prepared Direct Testimony of Jeff D. Makholm, Exhibit SOA-525 at 23.

1 determine the prudence of specific costs, the appropriate test to be
2 used is whether they are costs which a reasonable utility
3 management (or that of another jurisdictional entity) would have
4 made, in good faith, under the same circumstances, and at the
5 relevant point in time. We note that while in hindsight it may be
6 clear that a management decision was wrong, our task is to review
7 the prudence of the utility's actions and the costs resulting
8 therefrom based on the particular circumstances existing either at
9 the time the challenged costs were actually incurred, or at the time
10 the utility became committed to incur those expenses.⁵

11 The above-quoted language from *New England Power Co.* reflects my
12 understanding of the standard the FERC applies when reviewing the prudence of a
13 utility's investments. I concur with Dr. Makholm's adoption of that standard for
14 evaluation of the Carriers' SR project.

15 **Q8. Does the RCA apply a similar prudence standard?**

16 A8. As discussed by Dr. Makholm,⁶ the RCA applies a reasonable-manager standard
17 similar to the one set forth in *New England Power Co.* As discussed in greater
18 detail by Mr. Brown, under AS 42.06.450, the RCA is given the authority to
19 determine whether expenditures have been imprudently incurred and, if they have,
20 the RCA is directed to take the appropriate action to ensure that "neither the direct
21 nor indirect costs of any . . . imprudent expenditures are included in any tariff or
22 rate of a pipeline carrier or are borne by the public or the state."

⁵ *New England Power Co.*, 31 FERC ¶ 61,047, 61,084 (1985).

⁶ Makholm, Exhibit SOA-525 at 24.

B. Comments on the State’s Prudence Case

Q9. Please provide your overall comments regarding the State’s prudence testimony.

A9. In short, the State’s case demonstrates that the Carriers acted imprudently in virtually all phases of planning and executing the SR Project. I reviewed the direct testimony presented by State witnesses Makholm, Sanders, Adams, and Sullivan. Their testimony is well-reasoned, firmly grounded in established principles of prudence, and thoroughly supported by evidence, much of which consists of the statements of the Carriers themselves. Dr. Makholm concisely summarized the State’s conclusions that “neither the governance of the decision to proceed with SR, nor the implementation of the project was managed prudently.” Makholm, Exhibit SOA-525 at 5:3-4.

Q10. What points raised by Dr. Makholm did you find persuasive?

A10. Dr. Makholm identified four aspects of Alyeska Pipeline Service Company’s (“Alyeska”) and the TAPS Carriers’ behavior that were imprudent:

- (1) Poor governance;
- (2) Failure to respond to the lack of lump-sum contracts;
- (3) Incomplete analysis and the decision to proceed with such a large project based on incomplete and evidently faulty analysis; and
- (4) Poor implementation of the project.

Makholm, Exhibit SOA-525 at 29:8-13. I agree with Dr. Makholm that each of these four aspects were imprudently undertaken by the Carriers.

On the issue of poor governance, Dr. Makholm correctly notes that Alyeska claimed that the TAPS Carriers “micromanaged” the project and that a

1 disjointed and contentious relationship formed between Alyeska’s management
2 and the TAPS Carriers. Makholm, Exhibit SOA-525 at 5:10-12.

3 On the issue of lump-sum contracts, Dr. Makholm properly points out that
4 Alyeska evaluated the Electrification Option on the assumption that much of the
5 construction would be on a lump-sum basis, but lump-sum contracts were not
6 used for much of the construction work on the SR Project. Makholm, Exhibit
7 SOA-525 at 6:2-4.

8 In addition, Dr. Makholm correctly concludes that the Carriers’ analysis
9 and decision to proceed with the SR Project was deficient. Dr. Makholm’s
10 assessment is that the Electrification Option was selected prematurely and that the
11 economic analysis was highly sensitive to the speculative and inaccurate cost
12 estimates and project schedules. Makholm, Exhibit SOA-525 at 6:13-15.

13 Dr. Makholm further plausibly concludes that the Carriers’
14 implementation of the SR Project was flawed in numerous respects, including the
15 adoption of a “fast track” schedule that was far too accelerated for a project of the
16 magnitude of SR and spiraling costs. Implementation includes the remaining
17 procurement work and all construction, functional check-out, and start-up
18 activities. Prepared Direct Testimony of Christopher J. Sullivan, Exhibit SOA-1
19 at 124:3-5.

1 **Q11. Were there other aspects of Dr. Makhholm’s presentation that you found**
2 **persuasive?**

3 A11. Yes. Relying on documents and analysis presented by Mr. Sanders, Mr. Adams,
4 and Mr. C. Sullivan, Dr. Makhholm concludes that the Electrification Option was
5 selected prematurely and that the economic analysis was highly sensitive to the
6 speculative and inaccurate cost estimates and project schedules. Makhholm,
7 Exhibit SOA-515 at 6:13-15. In this regard, Mr. Sanders explains that the
8 “Carriers should have allocated at least 5 years rather than the 22 months allowed
9 for Strategic Reconfiguration.” Sanders, Exhibit SOA-425 at 55:1-58:5.
10 Likewise, Mr. C. Sullivan testifies that it was unreasonable and imprudent to fast-
11 track the biggest and most complex project undertaken by Alyeska since the
12 pipeline was originally constructed in the 1970s. Sullivan, Exhibit SOA-1 at
13 10:11-13.

14 On the issue of the SR Project’s spiraling costs, Mr. Adams explained that
15 Alyeska and the TAPS Carriers improperly managed the SR Project, piling
16 additional excessive costs on top of an already economically unviable project.
17 Prepared Direct Testimony of Frank G. Adams, Exhibit SOA-275 at 2:11-12; and
18 13:3-4. In reaching this conclusion, Mr. Adams discussed several factors,
19 including Alyeska’s project management standards and project management,
20 Alyeska’s project planning, Alyeska’s management of its contractors, and
21 Alyeska’s inability to assess project status. Adams, SOA-275 at 13:5-11.

1 **Q12. Does Dr. Makholm identify possible reasons for the problems encountered by**
2 **Alyeska and the TAPS Carriers in planning and managing the SR project?**

3 A12. Dr. Makholm focuses on the adverse impact of the TAPS joint venture on the
4 behavior of the TAPS Carriers. According to Dr. Makholm, the poor working
5 relationship between Alyeska and the TAPS Carriers should have been expected,
6 in part, because the TAPS Carriers formed a joint venture, which creates the
7 internal friction and diverse incentives. Makholm, Exhibit SOA-525 at 32. He
8 explains that the relationship between Alyeska and the TAPS Carriers was
9 disjointed and contentious. Makholm, Exhibit SOA-525 at 5:10-16.

10 Dr. Makholm provided strong documentary evidence that the strained
11 relationship between Alyeska and the TAPS Carriers led to serious problems in
12 planning and implementation of the SR Project. Makholm, Exhibit SOA-525 at
13 29:14-33:8. Dr. Makholm attributes the poor governance of the SR Project in part
14 to the joint-venture ownership structure of TAPS.

15 Another source of the governance problems suggested by Dr. Makholm,
16 but not fully explored, is the vertical integration of the leading TAPS Carriers. In
17 the Introduction to his Direct Testimony, Dr. Makholm suggests that the
18 governance and management problems are created by the vertically integrated,
19 joint-venture industry structure of Alyeska:

[T]he complex, vertically integrated, joint ventured industry structure of the interstate pipeline industry presents its participants with governance and management problems that are reflected in the decision making process at Alyeska.

Makholm, Exhibit SOA-525 at 4:7-10.⁷

Q13. Do you agree with Dr. Makholm?

A13. I agree with Dr. Makholm that the joint venture ownership structure and vertical integration of TAPS are sources of governance problems. Below, I discuss why the vertical integration and “integrated economics” of the TAPS Carriers and their affiliates provide context for understanding and further supporting the imprudent conduct documented by Dr. Makholm and the other State witnesses.

C. TAPS “Integrated Economics” and Impacts on SR Decisionmaking

1. The TAPS Carriers Are Components of Vertically-Integrated Enterprises

Q14. Initially, please explain why TAPS “integrated economics” are pertinent to the SR prudence evaluation.

A14. The *New England Power Co.* prudence standard discussed above states that “managers of a utility have broad discretion in conducting their business affairs and in incurring costs *necessary to provide service to their customers.*”⁸ The Carriers have failed that test to the extent their SR investment decisions were influenced by factors for the benefit of their affiliated companies and imposed unreasonable costs on TAPS shippers. A prudent manager would consider only

⁷ Alyeska is jointly owned by the TAPS Carriers and serves as their agent for pipeline design, construction, operation, and maintenance of TAPS. Exhibit AT-2 at ii, 17-19.

⁸ 31 FERC ¶ 61,047, 61,084 (1985) (emphasis added).

1 factors relating to providing efficient service for all the pipeline's shippers.
2 Affiliated considerations would not shape or determine the investment or timing
3 of the project.

4 As I discuss in detail below, the Carriers' decisions relating to the SR
5 project were not driven solely by the need to operate the TAPS pipeline in the
6 most efficient and economic manner possible. Rather, their decisions were highly
7 influenced by the integrated economics and best interests of the Carriers'
8 affiliated companies.⁹ To the degree the Carriers' decisions were grounded in the
9 concerns of their affiliates, the FERC and the RCA should review those decisions
10 with heightened regulatory concern. A reasonable manager would not permit
11 affiliated concerns to drive the investment or timing in the SR project.
12 Accordingly, TAPS integrated economics provides context for understanding and
13 further supporting the findings of imprudence set forth by the State's witnesses.

14 **Q15. Please explain what you mean by the "integrated economics" of TAPS.**

15 A15. In general, the TAPS Carriers are components of larger, vertically-integrated
16 corporate entities.¹⁰ Investment decisions for TAPS are based on the integrated
17 economics of these larger affiliated enterprises.

18 The integrated economics of TAPS decisionmaking were explained by
19 Charles J. Coulson, President of BP Pipelines (Alaska) Inc. ("BPPA") and current

⁹ Koch is the sole exception to this general statement. Koch does not have a production affiliate. Exhibit AT-3 at 44:2-3. However, Koch owns only a 3.08 percent share of TAPS, so this fact does not impact my overall analysis and conclusions. Exhibit SOA-6.

¹⁰ As discussed in n.9, *supra*, Koch is the sole exception to this general statement.

1 chairman of the TAPS Owners Committee, in testimony before Judge Cianci in
2 Phase 1 of this proceeding,¹¹ as well as in a deposition in state ad valorem tax
3 proceedings.¹² For example, Mr. Coulson testified that the BP corporate group
4 makes investment decisions based on the “corporate best interest” of the
5 “integrated group” of BP companies.¹³ Indeed, while BPPA can request funds
6 and recommend investments,¹⁴ Mr. Coulson confirmed that the BP upstream
7 executive group approves the budget.¹⁵

8 The Carriers cannot be understood as pure transportation companies
9 engaged in providing pipeline service in exchange for the opportunity to earn a
10 regulated rate of return. Rather, Mr. Coulson explained that TAPS was
11 constructed by the *production affiliates* to bring *their* oil to market.¹⁶ In this
12 regard, Mr. Coulson explained that TAPS was not constructed principally to earn
13 a regulated return associated with providing pipeline service:

14 Q Is it fair to say that investments off the North Slope are driven
15 by the economics, the integrated economics of bringing the oil
16 to market?

17 A Yes.

¹¹ Exhibit AT-4.

¹² Exhibit AT-5.

¹³ Exhibit AT-4 at 15 (367:3-14); and Exhibit AT-5 at 16 (58:3-24).

¹⁴ Exhibit AT-4 at 12 (356:9-19).

¹⁵ Exhibit AT-5 at 11 (41:9-11).

¹⁶ Exhibit AT-5 at 16 (58:3-24).

1 Q The pipelines aren't built in Alaska for regulatory return alone,
2 are they?

3 A No.

4 Q Investments in those pipelines in Alaska is not based on
5 regulatory return alone; correct?

6 A That's correct.¹⁷

7 **Q16. Are you aware of other facts demonstrating this integration of the Carriers**
8 **and their production affiliates?**

9 A16. Yes. The staffing of BPPA is another example of this integration. BPPA has no
10 employees of its own.¹⁸ All of its employees are assigned to it by its exploration
11 and production affiliate, BP Exploration (Alaska) Inc. ("BPXA").¹⁹ All of
12 Mr. Coulson's pay, as well as the compensation for other employees assigned to
13 BPPA, comes from BPXA.²⁰

14 Moreover, BPPA's employees are not compensated based on the
15 performance of BPPA alone. Thus, Mr. Coulson's bonus is based not only on the
16 performance of BPPA but also on the "combined performance of all the Alaskan
17 assets."²¹ Mr. Coulson's bonus is determined based on the combined
18 performance of the production and transportation functions.²²

¹⁷ Exhibit AT-4 at 15 (365:23-366:7).

¹⁸ Exhibit AT-4 at 12 (354:15-17).

¹⁹ Exhibit AT-5 at 9 (31:19-25).

²⁰ Exhibit AT-5 at 9 (31:17-25).

²¹ Exhibit AT-5 at 3 (9:15-20).

²² Exhibit AT-5 at 5 (16:1-17:9).

Another example of these integrated economics is the way collections and disbursements are handled on BPPA's behalf. BPPA maintains no bank accounts of its own.²³ The tariff rates paid under BPPA's TAPS tariff are actually received by an affiliated company.²⁴ And, when BPPA pays cash calls to Alyeska, which operates TAPS on behalf of all of the Carriers, the money is sent to Alyeska from an affiliated BP company.²⁵ Thus, while BPPA is an "owner" of TAPS, it never touches money received from its own TAPS tariffs or money paid to Alyeska for BPPA's share of TAPS costs.

Q17. Has this vertical integration been recognized in other forums?

A17. Yes. There are numerous acknowledgements that the TAPS Owners are integrated companies. For example, during the Alaska Superior Court's review of the State Assessment Review Board's ("SARB's) decision and the Department of Revenue's 2006 assessment of TAPS for ad valorem tax purposes, Judge Gleason found that TAPS "is an integrated property with its Owners' affiliates." Exhibit AT-6 at P 74. Judge Gleason also concluded:

The Owners each have an undivided interest in TAPS . . . an ownership structure that is unique in that it is specifically adapted to accommodate the use of TAPS by its individual owners as part of their *vertically integrated business operations*.

(Emphasis added.) Exhibit AT-6 at P 97, citing, in part, B. Sullivan Tr. 1875 and Brown Tr. 1982-83.

²³ Exhibit AT-4 at 11 (351:1-4); Exhibit AT-5 at 9 (31:15-18).

²⁴ Exhibit AT-4 at 13 (357:18-21).

²⁵ Exhibit AT-4 at 13 (357:25-358:7).

1 Judge Gleason also found that:

2 In Alaska, the vertically integrated producers have maintained
3 ownership and control of the pipelines they rely upon to bring their
4 crude oil to market. The Owners' appraisal expert acknowledged
5 she was not aware of any 'crude oil pipeline or refinery products
6 pipeline or gas pipeline in Alaska . . . owned by a master limited
7 partnership or an investor for tariff income only.' In short, the
8 record persuasively demonstrates that *TAPS was built and is*
9 *operated and would be replaced based upon the economics of*
10 *transporting affiliated ANS production to market.* The record does
11 not indicate that TAPS was built for or would be replaced for its
12 tariff income. [Exhibit AT-6 at P 105 (emphasis added, citations
13 omitted).]

14 Furthermore, Judge Gleason referred to the testimony of Dr. Jaffe, a
15 prominent economic expert who testified on behalf of the TAPS Owners before
16 the FERC. In that testimony, Dr. Jaffe stated that "[t]he market for transportation
17 of oil through TAPS is very different from markets in which competition is
18 typically evaluated, and is even different in significant ways from most other oil
19 pipelines." Exhibit AT-6 at P 103. Dr. Jaffe further explained that "the
20 movement of petroleum through TAPS is dominated by shipments in which the
21 shipper is among the corporate affiliates of the Carriers" and "TAPS is largely a
22 closed system in which the vast majority of business is transacted among
23 affiliated buyers and sellers." Exhibit AT-6 at P 103. Judge Gleason also found
24 that, excluding the State and other royalty shares, "the current three largest ANS
25 operators (BP, ExxonMobil, and ConocoPhillips ("TAPS Big Three")) are
26 projected to continue to produce a combined total of at least 88% of each year's
27 total ANS production every year through 2050." Exhibit AT-6 at P 104.

28 In addition, Judge Gleason explained:

1 107. The affiliated producers of the Owners typically nominate
2 their ANS production to their affiliated TAPS Owner; and
3 typically do not sell their ANS production to a third party at any
4 point upstream of TAPS that would permit a third-party purchaser
5 to nominate to a nonaffiliated TAPS Owner.

6 108. The record demonstrates that when ANS production is sold to
7 a third-party purchaser, the sale may be on a delivered basis,
8 typically to destinations outside of Alaska. Under the terms of
9 such a sale, each major TAPS Owner maintains control of the
10 transportation of its ANS production from the point of production
11 to the point of delivery on the West Coast. "This is a bundling, if
12 you will, of oil, transportation, port facilities and then shipment to
13 delivery markets. And these are not the kind of things that you see
14 in the Lower 48 or around the rest of the world."

15 109. The Owners' terms and conditions of providing transportation
16 service on TAPS give "Regular Shippers" (i.e., the Owners'
17 affiliated producers) priority in accessing TAPS capacity, which
18 serves to support affiliated dominance of TAPS.

19 110. The evidence demonstrates that the Owners are almost
20 completely dependent upon their affiliate and parent companies.
21 With one limited exception, the Owners do not have employees,
22 independent financial capacity, or substantial assets, other than
23 their interest in TAPS. The Owners did not and could not have
24 independently financed the original construction of TAPS and they
25 do not independently finance substantial improvements to TAPS –
26 instead, the affiliated production companies have financed TAPS.

27 Exhibit AT-6 at PP 107-110 (citations omitted).

28 Also, TAPS witness Joseph Kalt, in a proceeding before the FERC in
29 2006, testified that "I am mindful that they (TAPS Owners and their affiliates) are
30 part of larger oil companies, vertically integrated companies." Exhibit AT-7 at
31 1288:24-25.

32 **Q18. Have you done further analysis regarding the integration of the Carriers?**

33 A18. Yes. In particular, I studied the three largest TAPS Carriers, BP, ConocoPhillips,
34 and ExxonMobil, which I refer to as the "TAPS Big Three." Exhibit AT-8 lists

1 the five current TAPS Carriers, their parent companies, their production affiliates,
2 and their Alaskan production. As can be seen from Exhibit AT-8, the TAPS Big
3 Three hold a 96 percent ownership interest in TAPS. The TAPS Big Three also
4 own the major transit feeder pipelines, which connect production areas on the
5 ANS to TAPS. In addition, the TAPS Big Three own substantial refinery
6 capacity in the U.S. *See* Exhibit AT-8.

7 Exhibit AT-9 shows that the combined market share of the TAPS Big
8 Three in seven of the eight major fields on the ANS is 78 percent or more. In six
9 of the eight fields, the TAPS Big Three's combined market share is 90 percent or
10 higher. In the largest field, Prudhoe Bay, the TAPS Big Three's combined market
11 share is 99 percent. In addition, the TAPS Big Three continue to own substantial
12 refining capacity in the continental U.S. (*see* Exhibit AT-8), including affiliated
13 refineries on the West Coast.

14 **2. The Markets for ANS Oil Transportation and the Ownership**
15 **of ANS Production Are Highly Concentrated**
16

17 **Q19. You stated earlier that “the TAPS Carriers are components of larger,**
18 **vertically-integrated corporate entities.” Can you quantify the extent of this**
19 **vertical integration?**

20 A19. Yes. The evidence is clear that the TAPS Big Three are vertically integrated
21 across transportation, production, and refining. Each of the TAPS Big Three own
22 substantial assets in the production and transportation of ANS crude oil as well as
23 substantial refining capacity in the U.S. The high degree of concentration in the

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1 ownership of TAPS suggests that the TAPS Big Three own almost all the TAPS
2 transportation capacity and dominate the production of crude oil on the ANS.

3 To quantify the market concentration for market transportation, for
4 example, I use the Herfindahl-Hirshman Index (“HHI”), as suggested by FERC in
5 its oil pipeline policy statement. 18 CFR Part 348, ¶ 31,177 at 31,192-93, Order
6 No. 572, *Market-Based Ratemaking for Oil Pipelines* (1994) (“Oil Pipeline Policy
7 Statement”), Statement G: Market Power Measures.²⁶ The Commission has
8 generally found that an HHI above 2500 raises competitive concerns. *Williams*
9 *Pipe Line Company*, 68 FERC ¶ 61,136 (1994) at 61,663. Using the market
10 shares of all five TAPS Carriers, including minimal market shares held by Unocal
11 and Koch, the corresponding HHI is 3428.²⁷ (See Exhibit AT-8) An HHI of 3428
12 is above the 2500 threshold HHI used by the FERC to indicate a highly
13 concentrated market and a possible market power concern.²⁸

²⁶ An HHI is calculated by summing the squares of each transportation provider’s market share. For example, if there were five firms in the market with market shares of 5, 10, 20, 30, and 35, respectively, the HHI equals $(5)(5) + (10)(10) + (20)(20) + (30)(30) + (35)(35) = 2650$. If, on the other hand, there was only one seller in the market (*i.e.*, a monopoly), its market share would be 100 percent and the corresponding HHI would be 10000. The HHI can range from just above zero, where there are a large number of competitors in the market, to 10000 where the market is served by a single monopolist. A high HHI indicates significant concentration. This means that a pipeline is much more likely to be able to exercise market power either unilaterally or through collusion with rival firms in the market.

²⁷ A similar HHI analysis indicates there is also a market-power concern in the production and refining aspects of the integrated operations of the Big Three.

²⁸ Given that the transportation market is subject to rate regulation, the TAPS Owners cannot increase the TAPS rate above the maximum regulated level. Nevertheless, the high HHI still indicates that sellers can act together to promote their mutual interests. Since the TAPS Owners are highly, vertically integrated, they have an incentive to
(continued . . .)

1 **Q20. Are there alternatives to TAPS for transporting Alaska North Slope oil?**

2 A20. No. There is no alternative to transporting ANS oil on TAPS. As the D.C.
3 Circuit Court has stated:

4 The Trans Alaska Pipeline System (“TAPS”) provides the sole
5 means of shipping petroleum produced from the North Slope of
6 Alaska south to the Port of Valdez, Alaska.

7
8 *OXY USA, Inc. v. FERC*, 64 F.3d 679, 684; 314 U.S. App. D.C. 175 (1995).

9 There are no viable alternatives to TAPS. In this sense, my structural
10 analysis of the transportation market in the ANS supports Dr. Makholm’s
11 observation that TAPS is a “de facto monopoly transporter for Alaska North
12 Slope oil.” Makholm, Exhibit SOA-525 at 4:6-7 and 25:8-9. As a result,
13 Dr. Makholm explains that TAPS does not face the risk of competitive bypass in
14 contrast to the interstate oil pipelines in the lower-48 states. Makholm, Exhibit
15 SOA-525 at 25:6-8.

16 **Q21. What regulatory concerns does the high HHI in the ANS oil transportation**
17 **market and the lack of competitive bypass opportunities raise?**

18 A21. The high HHI in the ANS oil transportation market is indicative of a highly
19 concentrated market which raises a significant market power concern. This is
20 made worse by the lack of any competitive alternative to service on TAPS.
21 Consequently, the lack of competition in the market creates a need for continued

(. . . continued)

control the operation of TAPS. More specifically, the TAPS Owners can act together to manage and to make investment decisions on TAPS that (1) impose unreasonable costs on TAPS, but (2) benefit their other affiliated operations. This is exactly what happened with the SR Project.

1 regulatory oversight by the State of Alaska and FERC. In contrast, in a
2 competitive market, competing transportation providers would force TAPS to
3 only incur costs that were efficient, necessary, and required to provide continuing
4 safe and reliable *transportation* service on TAPS. Nontransportation costs related
5 to affiliate needs or affiliate financial reporting would not be incurred because
6 these costs would likely be unrecoverable.

7 **3. Consequences of TAPS Integrated Economics**

8 **Q22. What are the consequences of the TAPS integrated economics?**

9 A22. A major consequence of the “integrated” economic approach taken by the
10 Carriers is that investment decisions on TAPS have been driven in large measure
11 by the needs and best interests of their affiliated companies rather than solely by
12 the considerations a prudent manager would consider. In addition, these decisions
13 have not been in the interest of operating TAPS in the most cost-efficient manner.
14 Such an “integrated” approach to investments may not be expected to align with
15 the actions of a prudent manager separately considering the benefits to the
16 pipeline company and its shippers alone.

17 As I noted in my summary comments, the Carriers’ investment decisions
18 relating to the SR project seem grounded, in significant part, in affiliated concerns
19 which included realizing expiring tax benefits and “booking” additional reserves.
20 Rather than properly vet the options to the SR project, set a reasonable time frame
21 and implementation plan for the option selected, and correct errors in judgment as
22 the project proceeded, the Carriers permitted affiliated concerns and their

1 “integrated” economic analysis to shape their decisions throughout the entire
2 process. The result was that their decision process was so tainted with improper
3 affiliated concerns that the Carriers did not seem to separately consider the merits
4 of their approach to the SR project based upon the impact to them and their
5 shippers alone.

6 Moreover, while justifying the SR project, in part, based upon the
7 potential benefits to affiliated companies, the Carriers acted to ensure that certain
8 of these alleged benefits could only be realized by their affiliated producers. For
9 example, BPXA booked millions of barrels of additional reserves based upon
10 BPPA’s evaluation, which suggests that the SR project would extend the
11 economic life of TAPS through 2050. BPPA’s evaluation, however, was
12 maintained by BPPA as a confidential evaluation, and BPPA’s position with the
13 FERC and the RCA is that the economic life of TAPS is limited to 2034. Thus,
14 the Carriers have disadvantaged independent producers and shippers by asserting
15 publicly that the economic life of TAPS has not been extended by the SR project
16 while privately providing information to affiliated producers that permitted them
17 to “book” millions of barrels of additional reserves.

18 The dominance of an integrated economic approach is also apparent in the
19 nomination process in which the Carriers’ affiliated shippers nominate to their
20 affiliated Carriers based upon “integration” considerations rather than based on
21 the tariff rate. The integrated economics of affiliate tendering was well
22 documented in the record in the Non-SR phase of these proceedings. *See* Exhibit

1 AT-10 at 21-22; Exhibit AT-11 at 6, 13, 15, 20. In short, affiliate tendering
2 maximizes the profitability of the integrated enterprise.²⁹ Affiliate tendering
3 results in no transfer of money outside the integrated enterprise. Mr. Coulson
4 aptly characterized affiliate tendering as “a pocket-to-pocket transaction.”³⁰

5 The dominance of an integrated economic approach is also apparent in the
6 Carriers’ aggressive pursuit of a strategy based upon “high tariffs” due, in
7 significant part, to the royalty and severance tax savings realized by their
8 affiliated producers from such a strategy.³¹

9 **4. Impacts of TAPS Integrated Economics on SR Decisionmaking**

10 **Q23. Did TAPS integrated economics play a role in the Carriers’ SR project**
11 **decisionmaking?**

12 A23. Yes. In his deposition in the state ad valorem case, Mr. Coulson was asked,
13 “[F]or example, what economics did BP do in approving strategic
14 reconfiguration?”³² Mr. Coulson replied, “BP Pipelines looked at the benefit to
15 BP group of making that investment. Of necessity, that required us to look
16 *beyond the borders of just – the assets we managed and make some assumptions*
17 *about that benefit.*”³³

²⁹ Exhibit AT-5 at 15 (56:14-57:12).

³⁰ Exhibit AT-5 at 15 (55:4-11).

³¹ Exhibit AT-12.

³² Exhibit AT-5 at 13 (48:7-8).

³³ Exhibit AT-5 at 13 (48:12-16) (emphasis added).

1 **Q24. Are there examples of how these integrated economics shaped the issues**
2 **considered by the Carriers in their decision to pursue SR?**

3 A24. Yes. The State has already discussed how the Carriers expedited the schedule of
4 the SR project in an effort to realize certain tax benefits. While these benefits
5 inured to the overall affiliated enterprises, they had no impact on shippers' rates.
6 *See, e.g., Sullivan, Exhibit SOA-1 at 11, 114, 143, 179, 189, 192, 196, 197, 223.*

7 As another example, the evidence presented by the State, as well as other
8 evidence produced by the Carriers in discovery, shows that BPPA understood that
9 the SR Electrification Option would allow its production affiliate to book
10 additional reserves, thus increasing the value of its reserve portfolio. The booking
11 of additional reserves brings benefits to BPPA's affiliates, and therefore enriches
12 the overall corporate enterprise. But this reserve booking has nothing to do with
13 service on TAPS, and therefore confers no benefit on independent shippers that
14 use TAPS and must shoulder the costs of SR through TAPS rates.

15 **Q25. Please explain the impact of the SR Electrification Option on the booking of**
16 **reserves by TAPS production affiliates.**

17 A25. Documents produced in discovery show that one of the benefits of the SR project
18 was that it would reduce the level of minimum flow on TAPS and extend the
19 economic life of TAPS, thereby allowing the Carriers' production affiliates to
20 book additional reserves.³⁴ For example, a document produced by BP Americas,

³⁴ The specific evidence cited herein focuses on BPPA because BPPA is the largest percentage owner of TAPS and the President of BPPA is the current chairman of the TAPS Owners Committee.

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1 Inc., discussing SR electrification includes a slide entitled “What is the link
2 between Turndown and Reserves?”³⁵ This slide discusses the impact of the
3 “mechanical turndown ability” of the TAPS pumps, which is the ability of the
4 pumps to handle reduced flow of oil, on the ability of BPXA to book reserves.

5 The slide states:

- 6 • This mechanical turndown ability (combined with future
7 investments in line heaters, more pig launchers/receivers, water
8 management, etc.) is an enabler to book more reserves than
9 would otherwise be possible.
- 10 • All of these modifications should allow TAPS to operate down to
11 ~135 MBD.
- 12 • [BPXA] has already incorporated this lower hydraulic limit into
13 the basis for its reserve bookings.³⁶

14 Thus, because the SR project may have allowed TAPS to operate at lower
15 throughput levels, thereby extending the life of TAPS, BPXA can book additional
16 reserves now, and has already done so.

17 Other documents show that booking additional reserves was a highly
18 desirable feature of the SR Electrification Option. A November 5, 2004, e-mail
19 between John Haines and Al Bolea, the President of BPPA, explains that
20 “[m]omentum is starting to grow around booking more reserves based on an

³⁵ Exhibit SOA-353 at 8.

³⁶ Exhibit SOA-353 at 8.

1 updated view of TAPS minimum achievable rates.”³⁷ Another document
2 characterizes the booking of additional reserves as “THE PRIZE!”³⁸

3 **Q26. How did this ability to book additional reserves affect the Carriers’**
4 **decisionmaking?**

5 A26. While it is impossible for me to state precisely how the Carriers weighed this
6 factor in relation to other factors, it is telling that BPPA internal documents state
7 that cancellation of the Electrification Option would put at risk 63 million barrels
8 of oil that BPXA already booked. This point was made in the following
9 documents:

- 10 • A Decision Support Package Supplement dated August 24, 2005 states
11 that, “[a]t year-end 2004, BP booked an additional 63 mmboe of reserves
12 (SORP³⁹) on this basis. . . . If the project is cancelled, these additional
13 reserves will be at risk.”⁴⁰
- 14 • A BPPA Supplemental Finance Memorandum dated August 24, 2005,
15 makes the exact same statement.⁴¹
- 16 • Another BPPA Supplemental Finance Memorandum dated September 6,
17 2005, makes the exact same statement.⁴²

³⁷ Exhibit AT-13 at 1.

³⁸ Exhibit AT-14 at 3.

³⁹ Statement of Recommended Practice.

⁴⁰ Exhibit SOA-11 at 17. A similar statement is made on p. 22 of this exhibit.

⁴¹ Exhibit SOA-386HC at 2-3.

⁴² Exhibit AT-15 at 3.

1 Significantly, when considering the Hybrid Option and other alternatives
2 in light of the recognized history of the Electrification Option, including cost
3 overruns, leadership deficiencies, project scoping problems, and contractor
4 performance issues, all three of these documents conclude that, among other
5 issues, “[r]esurrecting [the Hybrid Option] would place the 63 mmboe of reserves
6 at risk.”⁴³

7 These statements were made well after the 43 “red flag events” depicted
8 by Mr. Sanders in his testimony.⁴⁴ Thus, by the time BPPA was stating that
9 resurrecting the Hybrid Option in place of the SR Electrification Option would
10 jeopardize 63 million barrels of additional booked reserves, questions had been
11 raised concerning, for example, whether existing equipment required replacement
12 (Red Flag No. 17),⁴⁵ whether cost savings from reduced staffing under the
13 Electrification Option were overstated (Red Flag No. 28),⁴⁶ and whether the
14 Electrification Option was superior to other alternatives given growth in costs and
15 project scope (Red Flag No. 33).⁴⁷ As Mr. Sanders testifies:

16 At the very least, once a reasonable manager saw these problems
17 emerging, he would have stopped and attempted to remedy these
18 errors by doing the necessary engineering and adjusting the
19 schedule before the errors compounded further. The TAPS

⁴³ Exhibit SOA-386HC at 3; Exhibit AT-15 at 4; *see also* SOA-11 at 22.

⁴⁴ Exhibit SOA-425 at 63.

⁴⁵ Exhibit SOA-425 at 65.

⁴⁶ Exhibit SOA-425 at 67.

⁴⁷ Exhibit SOA-425 at 67.

1 Carriers and Alyeska did not do this. They just kept going on with
2 the project.”⁴⁸

3 The documents I discussed above raise a concern that one reason the
4 Carriers “just kept going on with the project” is because they did not want to
5 jeopardize newly booked reserves attributable to the Electrification Option. To
6 the extent that these booked reserves were a factor in the Carriers’ decision to
7 continue with the Electrification Option, this was not prudent decisionmaking in
8 my opinion.

9 **Q27. Did the Carriers explain how the SR Electrification Option allowed BPXA to**
10 **book additional reserves?**

11 A27. Mr. Haines of BPPA explained:

12 The calculation process works as follows. Our consultant
13 identifies the capital investments and operating costs/parameters
14 required to allow TAPS to be run at low rates. Jim Foster, in turn,
15 converts this into a tariff. Then, commercial analysts within the
16 PU’s determine when an oil field’s cash flow goes negative, based
17 on a production profile tied to its proved reserves.⁴⁹

18 Likewise, the August 24, 2005 Decision Support Package Supplement
19 produced by BPPA states:

20 Concurrent with the [SR electrification] project, BP commissioned
21 a study to examine the minimum hydraulic rate at which the
22 reconfigured TAPS system could be operated. . . . [B]ecause of the
23 new variable speed electric drive pumps, along with anticipated
24 future investments in line heaters (beyond 2020), it is now believed
25 that TAPS can be operated to a minimum economic throughput

⁴⁸ Exhibit SOA-425 at 84.

⁴⁹ Exhibit AT-13 at 1.

1 rate of ~135 Mbps. At year-end 2004, BP booked an additional
2 63 mmboe of reserves (SORP) on this basis.⁵⁰

3 **Q28. Do the Carriers or their production affiliates provide any quantification of**
4 **the benefit of booking these additional reserves?**

5 A28. Yes. The August 24, 2005, BP Decision Support Package Supplement and the
6 August 24 and September 6, 2005, BPPA Supplemental Finance Memoranda state
7 that, by booking an additional 63 mmboe of reserves, BP “created a DD&A
8 improvement of about \$0.20/bbl for the Alaska BU.”⁵¹ “DD&A” is an acronym
9 for depletion, depreciation, and amortization.

10 **Q29. Would a prudent manager have applied the integrated approach to**
11 **evaluating the SR project?**

12 A29. No. A prudent manger would have considered the SR project based upon an
13 economic analysis of its benefits and costs only to the pipeline company and its
14 shippers, particularly if it would impose unreasonable costs on the pipeline
15 company. The Carriers’ “integrated” approach to the SR project leaves
16 independent producers and shippers to bear a great deal of the risk and costs for
17 benefits that may never be realized or may only be realized by affiliated
18 companies. To illustrate this point by example, assume the SR project would
19 have permitted the Carriers’ affiliates to book additional reserves at great cost and
20 no benefit to the shippers being provided service. A prudent manager would not
21 have proceeded with such a project while the Carriers apparently did.

⁵⁰ Exhibit SOA-11 at 17.

⁵¹ Exhibit SOA-11 at 17; Exhibit SOA-386HC at 2-3; Exhibit AT-15 at 3.

1 Anadarko/Tesoro should not have to bear the risks and costs of the Carriers
2 imprudent decisions designed, in significant part, to benefit their affiliated
3 companies.

4 **VI. CONCLUSION**

5 **Q30. Does this conclude your prepared direct testimony?**

6 A30. Yes, it does.

AFFIDAVIT OF BARRY E. SULLIVAN

WASHINGTON)

) ss.

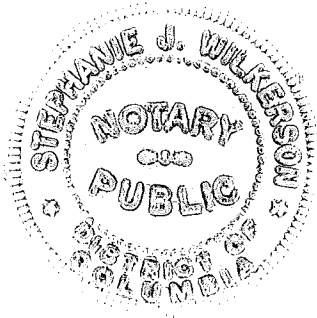
DISTRICT OF COLUMBIA)

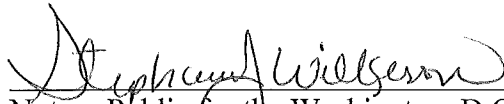
I, Barry E. Sullivan, say on oath or affirm that I prepared the foregoing Prepared Direct Testimony and believe all statements made in the document are true.



Barry E. Sullivan

SUBSCRIBED AND SWORN TO before me this 17th day of February, 2011.





Notary Public for the Washington, D.C.

My Commission Expires: June 30, 2014

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NATURE OF WORK
PERFORMED WITH
FIRM : Mr. Sullivan joined the firm in September 2005. He was elected President of BWMQ in April 2006. Since joining BWMQ, Mr. Sullivan has filed expert witness testimony in a number of natural gas and oil pipeline rate case proceedings (*see* Attachment B). Mr. Sullivan has over 31 years of experience in the natural gas pipeline, oil pipeline and electric utility industries. His areas of expertise include formal market power analysis and all facets of natural gas, and oil pipeline ratemaking.

PREVIOUS
EMPLOYMENT : Mr. Sullivan was employed by the Federal Energy Regulatory Commission from March 1979 to September 2005. He retired as a Supervisor in the Technical Analysis Division of the Office of Administrative Litigation. Mr. Sullivan was a technical expert for the entire 26 years he was at the Commission and provided testimony in many formal proceedings. The areas of his expertise included: formal market power analysis, market based rates, cost allocation and rate design, oil pipeline regulation, electric utility regulation, depreciation, Mcf/mileage studies, refunctionalization studies, offshore regulation, negotiated rates, discount studies, and other regulatory issues. Mr. Sullivan has applied his expertise relating to natural gas pipeline, oil pipeline and electric utility issues in a wide range of formal proceedings at the Commission. He has developed many creative and innovative approaches to deal

with these and related issues in administrative proceedings at the Commission.

As a Supervisor in the Office of Administrative Litigation, Mr. Sullivan supervised, initiated, directed and coordinated the preparation and presentation of the Commission's technical Trial Staff's settlement and testimony position on all matters set for formal hearing in natural gas pipeline, oil pipeline and electric utility proceedings. These issues include formal market power analysis, market based rates, rate design; seasonal rates; distance based rates; separation of services (unbundling); discounting; capacity release; capacity assignments; interruptible transportation rates; storage rate design; refunctionalization studies; stranded costs; restructuring issues; incremental versus rolled-in rates; depreciation and negative salvage; cost of service and rate base issues; oil pipeline rates; tariffs and operational issues; and the resolution of contract disputes.

Mr. Sullivan has testified as an expert witness on market power and market based rates, cost classification, allocation and rate design, billing determinants, depreciation, and other rate related issues in numerous natural gas rate proceedings, oil pipeline proceedings and electric proceedings. He has been responsible for various presentations to FERC Commissioners on such topics as Offshore Gathering Policy, Negotiated Rates and Discounting, Enron and Manipulation of the Western Energy Markets in 2000-2001, and Section 5 rate case proceedings.

Attachment A is list of the cases that Mr. Sullivan supervised while at the Commission. Attachment B is a list of the cases in which Mr. Sullivan provided testimony and/or testified.

Attachment A

Formal Proceedings Supervised by Mr. Sullivan

Applicant Name	Docket Number	Role	Case Type
AES OCEAN EXPRESS V FGT	RP04-249	Sponsor	Complaint Gas Quality on FGT
ALPINE TRANSPORTATION COMPANY	IS01-0033-000	Sponsor	Oil Pipeline Cost Based Rates
ANR PIPELINE COMPANY	CP00-0391-000	Sponsor	Gas Section 7 Certificate Proceeding
ANR PIPELINE COMPANY	RP02-0335-000	Sponsor	Gas Section 5 Cost Based Rates
ANR PIPELINE COMPANY	RP04-435-000	Sponsor	Complaint on Gas Quality Hydrocarbon Dew Point
ARCO PRODUCTS	OR96-2-000	Sponsor	Oil Pipeline Cost Based Rates
BIG WEST OIL CO v. ANSCHUTZ RANCH EAST	OR01-0003-002	Sponsor	Complaint Oil
BIG WEST OIL CO v. FRONTIER PIPELINE CO	OR01-0002-002	Sponsor	Complaint Oil
BOSTON EDISON COMPANY	EL02-0123-000	Sponsor	Complaint/Electric Transmission Rates, losses, Transmission Upgrades
BP TRANSPORTATION (ALASKA) INC	IS01-0504-000	Sponsor	Oil Pipeline Cost Based Rates
CANYON CREEK COMPRESSION COMPANY	RP02-0356-000	Sponsor	Gas Section 4 Cost Based Rates
CINERGY SERVICES INC.	ER01-0200-000	Sponsor	Electric Contractual Dispute
CITY OF DETROIT, MICHIGAN v. DETROIT EDI	EL00-0071-000	Sponsor	Electric Contractual Dispute
COLORADO INTERSTATE GAS COMPANY	RP01-0350-000	Sponsor	Gas Section 4 Cost Based Rates
CONOCO PIPE LINE COMPANY	IS01-0444-000	Sponsor	Oil Pipeline Cost Based Rates
CONOCO PIPE LINE COMPANY	IS01-0445-005	Sponsor	Oil Pipeline Cost Based Rates
EASTERN SHORE NATURAL GAS COMPANY	RP02-0034-000	Sponsor	Gas Section 4 Cost Based Rates
ENRON POWER MARKETING INC.	EL03-180 et al.	Sponsor	Western Market Show Cause Proceeding
ENRON AFFILIATED QF'S (INVESTIGATION OF)	EL03-0047-000	Sponsor	Complaint/Electric - Not Otherwise Categorized
ENTERGY OPERATING COMPANIES	ER99-3084-000	Team Leader	Electric Transmission Rate, Ancillary Services and/or Terms and Conditions
ENTERGY SERVICES, INC.	ER05-696	Sponsor	Electric Transmission Rate, Ancillary Services and/or Terms and Conditions
EQUITRANS	RP05-164	Sponsor	Gas Section 4 Cost Based Rates
EXPRESS PIPELINE LLC	IS02-0081-000	Sponsor	Oil Pipeline Cost Based Rates
EXXON-MOBILE PIPELINE COMPANY	IS00-0221-000	Sponsor	Oil Pipeline Cost Based Rates
FRENCH BROAD ELECTRIC MEMBERSHIP CORP V.	EL00-0076-000	Sponsor	Electric Contractual Dispute
HIGH ISLAND OFFSHORE SYSTEM	RP03-221	Sponsor	Gas Section 4 Cost Based Rates
KERN RIVER GAS TRANSMISSION	RPO4-274	Sponsor	Gas Section 4 Cost Based Rates
KINDER MORGAN OPERATING L.P.	IS02-0230-000	Sponsor	Oil Pipeline Cost Based Rates
MIDAMERICA OIL PIPELINE	IS05-216	Sponsor	Oil Pipeline Cost Based Rates
MILFORD POWER COMPANY, LLC	ER05-163	Sponsor	Electric Cost Based Rates RMR
NEW ENGLAND POWER COMPANY	ER01-0745-000	Sponsor	Electric Interconnection of Transmission Facilities
NATURAL GAS PIPELINE COMPNAV	RP01-503-002	Sponsor	Complaint on Gas Quality Hydrocarbon Dew Point
NORTHERN NATURAL GAS COMPANY	RP01-0395-000	Member	Fuel Adjustment Rates
NORTHERN NATURAL GAS COMPANY	RP98-0203-000	Member	Gas Section 4 Cost Based Rates
NSTAR SERVICES CO v. NEPOOL	EL00-0062-010	Sponsor	Complaint/Electric Transmission Rates, losses, Transmission Upgrades
PG&E GAS TRANSMISSION, NW CORPORATION	RP99-0518-019	Sponsor	Gas Market Based Rates
PINE NEEDLE LNG COMPANY, L.L.C.	RP02-0407-000	Sponsor	Gas Section 4 Cost Based Rates
PIONEER PIPE LINE COMPANY	IS01-0108-000	Sponsor	Oil Pipeline Cost Based Rates
PLATTE PIPE LINE COMPANY v. EXPRESS PIPE	IS02-0384-000	Sponsor	Oil Pipeline Cost Based Rates
PORTLAND NATURAL GAS TRANSMISSION SYSTEM	RP02-0013-000	Sponsor	Gas Section 4 Cost Based Rates
PSEG POWER CONNECTICUT, LLC	ER05-231	Sponsor	Electric Cost Based Rates RMR
PUB. UTIL. Comm. (CPUC) v. EL PASO NAT.	RP00-0241-006	Subject Expert	Gas Market Based Rates

PUB. UTIL. COMM. (CPUC) v.EL PASO NAT.	RP00-0241-000	Subject Expert	Complaint/Gas or Oil - Not Otherwise Categorized
SFPP, L.P. (PHASE I - MARKET POWER)	OR98-0011-000	Team Leader	Complaint/Gas or Oil - Not Otherwise Categorized
SFPP, L.P. (PHASE II - COST-OF-SERVICE)	OR98-0011-001	Sponsor	Complaint/Gas or Oil - Not Otherwise Categorized
SHELL OFFSHORE INC v. TRANSCO ET AL	RP02-0099-000	Member	Complaint/Gas or Oil - Not Otherwise Categorized
SOUTHERN LNG INC	RP02-0129-000	Sponsor	Gas Section 4 Cost Based Rates
SOUTHERN NATURAL GAS COMPANY	RP99-0496-000	Team Leader	Gas Section 4 Cost Based Rates
SOUTHERN NATURAL GAS COMPANY	RP04-523	Sponsor	Gas Section 4 Cost Based Rates
SUFFOLK COUNTY ELECTRICAL AGENCY	TX96-0004-000	Sponsor	Electric Transmission Rate, Ancillary Services and/or Terms and Conditions
SUMMIT POWER NW LLC, v. PORTLAND GENERAL	RP01-0433-000	Sponsor	Complaint/Gas or Oil - Not Otherwise Categorized
TEXAS GAS TRANSMISSION CORPORATION	RP00-0260-000	Subject Expert	Gas Section 4 Cost Based Rates
TRAILBLAZER PIPELINE COMPANY	RP03-0162-000	Sponsor	Gas Section 4 Cost Based Rates
TRANSCONTINENTAL GAS PIPELINE CORPORATIO	RP01-0245-000	Sponsor	Gas Section 4 Cost Based Rates
TRANSWESTERN PIPELINE COMPANY	RP97-0288-009	Sponsor and Wi	Gas Section 4 Cost Based Rates
VENICE GATHERING SYSTEM,L.L.C.	RP01-0196-000	Sponsor	Gas Section 4 Cost Based Rates
VIKING GAS TRANSMISSION COMPANY	RP02-0132-000	Sponsor	Gas Section 4 Cost Based Rates
WEST TEXAS LPG PIPELINE LIMITED PARTNERS	IS02-0331-000	Sponsor	Oil
WESTERN RESOURCES, INC	EC97-0056-000	Member	Merger Proceeding
WILLISTON BASIN INTERSTATE PIPELINE COMPANY	RP00-107	Sponsor	Gas Section 4 Cost Based Rates

Attachment B
Formal Proceedings in Which Barry E. Sullivan Testified

Docket No. CP79-80, Trailblazer Pipeline Company;
Docket No. RP80-121, United Gas Pipeline Company;
Docket Nos. RP80-97, and RP81-54, Tennessee Gas Pipeline Company;
Docket Nos. RP81-17 and RP81-57, Midwestern Gas Transmission Company;
Docket No. CP80-17, Trans Anadarko Pipeline System;
Docket No. RP82-46, South Georgia Natural Gas Company;
Docket No. RP85-39, Wyoming Interstate Company, Ltd.;
Docket No. RP85-60, Overthrust Pipeline Company;
Docket No. RP84-94, Trailblazer Pipeline Company;
Docket Nos. IS85-9 and OR85-1, Kuparuk Transportation Company;
Docket No. CP85-437 et al., Mojave Pipeline Company;
Docket No. RP88-197-000, Williston Basin Interstate Pipeline Company;
Docket No. RP90-109-000, Pacific Gas Transmission Company;
Docket No. RP90-8-000, Transcontinental Gas Pipe Line Corporation;
Docket No. RP90-119-000, Texas Eastern Transmission Corporation;
Docket No. RP85-39-009, Wyoming Interstate Company, Ltd;
Docket No. RP93-55-000, Trailblazer Pipeline Company;
Docket No. RP94-72-000, Iroquois Gas Transmission System;
Docket No. RP95-112-000, Tennessee Gas Pipeline Company;
Docket No. RP95-364-000, Williston Basin Interstate Pipeline Company;
Docket No. RP95-362-000, Koch Gateway Pipeline Company;
Docket No. RP91-203-062, Tennessee Gas Pipeline Company;
Docket No. RP97-126-000, Iroquois Gas Transmission System;
Docket No. RP97-373-000, Koch Gateway Pipeline Company;
Docket No. RP98-203-000, Northern Natural Gas Company;
Docket No. OR98-11-000, SFPP, L.P.;
Docket No. RP97-288-009 through 016, Transwestern Pipeline Company;
Docket No. RP02-99-000, Shell Offshore Inc., v Williams Field Services;
Docket No. EL02-114-000, Portland General Electric Company,
Docket No. EL03-154 and EL03-180, Enron Power Marketing, Incorporated;
Docket No. RP06-407, Gas Transmission Northwest;
Docket No. IS05-82, Anadarko/Tesoro versus TAPS Carriers Proceeding;
Docket No. RP08-306, Portland Natural Gas Transmission System;
Docket No. OR07-21, Mobil Pipeline Company;
Docket No. RP08-426, El Paso Natural Gas Company;
Docket No. RP09-427, Southern Natural Gas Company;
Docket No. RP10-729, Portland Natural Gas Transmission System;
Docket No. RP10-1398, El Paso Natural Gas Company; and
Docket No. RP 11-1435, Columbia Gulf Transmission Company