

2 OLYMPIC PIPE LINE COMPANY

3
4 REBUTTAL TESTIMONY OF TOM WICKLUND
5

6 **I. Name and Qualifications**

7 **Q. Please state your name, business address, and occupation.**

8 A. My name is Tom Wicklund. My title is Olympic Integrity Manager. My main
9 role is to manage the pipe related integrity program for the Olympic Pipe Line
10 Company ("Olympic"). My business address is 801 Warrenville Road, Lisle, IL
11 60532.

12 I work with BP's engineering group and Olympic's staff to ensure compliance
13 with federal integrity regulations and the Office of Pipeline Safety's Corrective
14 Action Order. The majority of my time has been spent on managing the
15 inspection and repair programs for Olympic. A portion of my time has also been
16 spent communicating progress on the integrity plan to internal and external
17 parties invested or interested in Olympic's integrity program.

18 **Q. Please summarize your educational background and professional experience?**

19 A. I graduated from the University of Michigan in 1980 with a Bachelor of Science
20 in Materials and Metallurgical Engineering.

21 I have worked twenty-one years for BP primarily in a pipeline project-
22 engineering role. The assignments consisted of project engineer, corrosion
23 specialist (in a BP technical services group), and corrosion engineer (on loan to

1 Alyeska Pipeline Service Co.). The majority of my experience is related to
2 integrity assurance, including inspection, testing, and rehabilitation. Projects
3 have included aspects of the following:

- 4 • Pipeline inspection and data interpretation;
- 5 • Develop and implement rehabilitation programs;
- 6 • Piping design;
- 7 • Hydraulics;
- 8 • Corrosion/cathodic protection; and
- 9 • New construction and repairs welding.

10 I have extensive in-line inspection experience for both corrosion and physical
11 damage. I have advised various BP organizations on pigging issues, I am
12 recognized as one of three "super-users" within the worldwide BP Pigging
13 Network, and I have extensive U.S. operator and vendor contacts. Prior to the
14 BP-Amoco merger, I had established and coordinated a risk-based long-range
15 smart pig inspection and repair program for BP Oil's lower 48 states liquids
16 pipelines. This program approach was significant in managing inspection and
17 repair program costs, as well as reducing pipeline failures related to corrosion
18 and third-party damage.

19 My engineering and project experience has required an understanding of the
20 liquid pipeline regulations and industry standards, as well as supervision of
21 company and contract personnel. My current position is focused on the integrity
22 of the pipe in Olympic system.

1 I am a current member of the B34.4/11 Subcommittee (since 1998). The
2 function of this committee is to review and revise the ASME B31.4 code for
3 "Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids."

4 **Q. Have you presented previous testimony in this docket, No. TO-011472?**

5 A. No, I have not.

6 **II. Summary of Testimony**

7 **Q. Please summarize your testimony.**

8 A. First, I will summarize the new High Consequence Area (HCA) regulation. I will
9 also elaborate on significant differences between pipeline integrity management
10 prior to and after the enactment of this new regulation. Discussion of this regulation
11 will provide evidence of increases of costs to Olympic due to additional company
12 manpower, vendor services, construction, and disruption of operations cost to
13 Olympic.

14 **III. New Federal Pipeline Regulations Will Permanently Increase Oil**
15 **Pipelines' Costs in High Consequence Areas**

16 **Q. Are there significant new federal regulations that will permanently raise**
17 **Olympic's costs of doing business?**

18 A. Yes. The most significant is the HCA regulation adopted in final form on
19 January 16, 2002; this applies to all major oil pipelines in the United States.
20 Exhibit No. ____ (DMC-4). Also, please refer to Exhibit No. ____ (BCB-17),
21 which were the proposed final rules issues in December 2000.

1 The newly adopted federal regulation requires all major U.S. oil pipeline
2 operators to create and carry out a plan that addresses the risks on each pipeline
3 segment that could affect HCAs. See 49 C.F.R. §195.452(a). Because much of
4 Olympic's 400 miles of pipeline are located in what federal law defines as HCAs,
5 Olympic is certain to see increases in compliance costs.

6 It is significant to note that prior to the creation of this regulation much of the
7 requirements of the new regulation were managed on a voluntary basis and varied
8 by operator. Instead of being a one-time expense, these compliance efforts will
9 continue annually at the same or even significantly higher levels.

10 **Q. What are High Consequence Areas?**

11 A. High Consequence Areas are defined as (1) commercially navigable waterways;
12 (2) high population areas; (3) other populated areas; and (4) areas unusually
13 sensitive to environmental damage. See 49 C.F.R. § 195.450. More
14 specifically, an HCA is defined as any area where (1) substantial likelihood of
15 commercial navigation exists; (2) there are 50,000 or more people and the
16 population density is at least 1,000 people per square mile; (3) any other highly
17 populated area (such as a city or town); or (4) an unusually-sensitive area. Most
18 of Olympic's system is located within a High Consequence Area.

19 **Q. What does the High Consequence Area rule require of pipeline companies?**

20 A. Under 49 C.F.R. § 195.452, every operator who owns or operates a total of 500
21 or more miles of hazardous liquid pipeline must develop a written integrity
22 management program that addresses the risk of each pipeline segment, which
23 could affect an HCA. The integrity management program must include (1)

1 identification of the segments that could affect an HCA; (2) a plan for the
2 baseline assessment of the pipeline, to be completed by March 31, 2008; and (3)
3 a framework to address each area of the integrity management program. The
4 regulation sets forth detailed requirements for each element of the integrity
5 management program.

6 The written plan for the baseline assessment must include the following
7 elements: (1) methods selected to assess the integrity of the line pipe; (2) a
8 schedule for completing the integrity assessment; and (3) an explanation of the
9 assessment methods selected and evaluation of the risk factors considered in
10 establishing the assessment schedule. Also, the operator must document any
11 changes to the plan and explain the reasons for the modification. Further, the
12 regulations detail the actions that must be taken by the pipeline company in
13 addressing integrity issues, such as discovering the integrity problem, scheduling
14 repairs, special timing for certain repairs, etc.

15 The HCA regulation outlines "conditions" of concern, in what timeframe these
16 conditions must be remediated and/or other operational actions, which must be
17 taken to assure safe operation of the pipeline. For instance "immediate
18 conditions" including: (1) metal loss greater than 80% of nominal wall; (2) other
19 metal loss which has a calculated remaining strength of the pipe with a predicted
20 burst pressure less than the established maximum operation pressure; (3) dents
21 located on the top of the pipe with metal loss, cracking or a stress riser; (4) a
22 dent located on the top of the pipe with a depth greater than 6% of the nominal
23 diameter as well as other anomalies which the operator believes requires
24 immediate action. Any anomaly meeting these conditions require the operator to

1 reduce the operating pressure or shut down the pipeline until repair is complete.
2 Other conditions must be remediated within 60 and 180 days of "discovery."

3 The regulations require pipeline operators to take preventative and mitigative
4 measures to protect HCAs. These include conducting a risk analysis of pipeline
5 segments, implementing damage prevention practices, improved monitoring of
6 corrosion issues, establishing inspection intervals, installing pipeline segments,
7 detecting leaks, providing additional training to personnel, and adopting other
8 management controls.

9 Finally, after establishing the baseline assessment, the operator must perform
10 follow-up assessments at periodic intervals not to exceed five (5) years. The
11 operator is also required to maintain a written integrity management program and
12 records and documents supporting the company's decisions, analyses and
13 modifications.

14 In summary, the HCA regulation establishes very rigorous requirements
15 including regular assessment of the condition of a pipeline and remediation of
16 any concerns, which may require either derating or shutting down the pipeline--
17 depending on the understood severity of an anomaly. The type and description of
18 anomalies is also much more conservative than previous industry standards
19 resulting in larger rehabilitation programs each time an assessment is completed.

1 **IV. New Pipeline Legislation is Pending Before Congress That Would**
2 **Further Increase Olympic's Costs**

3 **Q. Is there new legislation pending before Congress that would further increase**
4 **Olympic's costs?**

5 A. Yes. There is pending legislation before Congress that would propose additional
6 sales regarding inspections and operator requirements, and provide guidelines on
7 information that pipeline operators should provide to state and local officials.
8 This legislation would apply to all major pipelines in the United States and is
9 discussed in the testimony of Dan Cummings. Exhibit No. ____ (DMC-1T).

10 **Q. Does this conclude your present testimony?**

11 A. Yes.

12

13 BA021610074

14