BEFORE THE STATE ASSESSMENT REVIEW BOARD STATE OF ALASKA

In the Matter of:)	
)	Appeal of Revenue Decision
THE TRANS-ALASKA PIPELINE SYSTEM)	No. 09-56-02
)	
Oil & Gas Property Tax (AS 43.56))	OAH No. 09-SARB-TAX
2009 Assessment Year)	

CERTIFICATE OF DETERMINATION

The State Assessment Review Board (Board) convened from May 19, 2009 through May 26, 2009, to hear and deliberate on the AS 43.56 appeals of the 2009 assessment of the Trans-Alaska Pipeline System (TAPS). Chair Don (Marty) M. McGee and members Mary (Mickey) E. Keller and Steven L. Van Sant were present, constituting a quorum as required by AS 43.56.130(b).

Board Chair McGee conducted the hearing. Administrative Law Judge Mark T. Handley from the Office of Administrative Hearings assisted the Chair. ¹

TAPS owners ConocoPhillips Transportation Alaska, Inc., Exxon/Mobil Pipeline Company, Koch Alaska Pipeline Company, and Unocal Pipeline Company were represented by attorneys Steven Mahoney and James M. Seedorf. Owner BP Pipelines (Alaska) Inc. was represented by attorneys Mike Garatoni and James M. Seedorf. The five current owners are collectively referred to herein as "Owners." Kenneth J. Diemer, Assistant Attorney General, attorney Robert M. Johnson, and James H. Greeley represented the Tax Division (Division) of the Alaska Department of Revenue. The municipalities appealing the Division's 2009 TAPS assessment (Municipalities) were represented by attorneys William M. Walker and Craig Richards for the City of Valdez, Robin O. Brena for the Fairbanks North Star Borough, and Mauri Long for the North Slope Borough.

¹ Under Alaska Statutes 44.64.020(6) & .030(b), the Office of Administrative Hearings provided administrative law judges to advise the Board at the request of the Commissioner of Revenue.

A court reporter was present to administer an oath to witnesses and create a transcript of the hearing.

I. Introduction

The subject of this appeal is the Division's \$7.71506816 billion assessed valuation of the TAPS. The Division used Replacement Cost New Less Depreciation (RCNLD) methodology to arrive at its assessed valuation. The Owners argued that the 2009 TAPS value was less than \$1 billion. The Municipalities argued the TAPS assessed valuation should be set no lower than \$12 billion.

Under AS 43.56.130(f), the Board cannot adjust the Division's assessed valuation unless the evidence in the record shows that this valuation is unequal, excessive, improper or otherwise contrary to the standards set out in AS 43.56. The Board determined that the Division's \$7.71506816 billion valuation was improper and should be adjusted. The Board found that the Division's decision to use lower costs than the amounts used in the Pro Plus cost study for the contingency factor and for owners' costs was not justified. The Division relied on the Pro Plus cost study for its determination of the Replacement Cost New (RCN) of the TAPS, but reduced the contingency factor from 25% to 10% and the owners' costs from 10% to 5%. The Board recalculated the RCN using a 25% contingency factor and 10% for owners' costs. The Board then recalculated the RCNLD of the TAPS to adjust for these increases to the RCN. The Board concluded that its adjusted value of \$9.0458952 billion should be the 2009 assessed value of the TAPS.² The Board concluded the Municipalities and the Owners did not meet their burdens of proof to show that the Division's assessed valuation was otherwise unequal, excessive, improper or contrary to the standards set out in AS 43.56.

² See Graphic showing the Board's 2009 adjustments at page 18.

A. Description of the Property

The TAPS is an 800-mile long, 48-inch diameter, crude-oil transportation pipeline stretching from the oil fields of the North Slope of Alaska to the port terminal in Valdez, Alaska. The TAPS includes its oil-associated pump stations, buildings, materials, supplies, machinery, tanks, terminal facilities and other related property.

Portions of the TAPS are located in the municipalities of the City of Valdez, the Fairbanks North Star Borough, the North Slope Borough and the Unorganized Borough of Alaska. TAPS taxable property is also located in the Municipality Anchorage, the Matanuska-Susitna Borough, the City of Cordova, and the City of Whittier.

B. Names and Addresses of Each Owner of the TAPS

- 1. BP Pipelines (Alaska) Inc., PO Box 190848, Anchorage, AK 99519-0848
- 2. ConocoPhillips Transportation Alaska, Inc., PO Box 110360 Anchorage, AK 99510-0360
- 3. Exxon/Mobil Pipeline Company, PO Box 2220, Houston, TX 77252-2220
- 4. Koch Alaska Pipeline Company, LLC, PO Box 2913, Wichita, KS 67201-2913
- 5. Unocal Pipeline Company, 14141 Southwest Freeway, Sugar Land, TX 77478

C. Parties Appealing

The Owners of the TAPS and the Municipalities both appealed Alaska Department of Revenue Decision No. 09-56-02. This Informal Conference Decision set the 2009 assessed value for the TAPS at \$7.71506816 billion.

D. Consolidation and Coordination of Appeals

For the appeal before the Board of the Division's 2009 assessment of the TAPS, the

Owners' and the Municipalities' appeals of Revenue Decision No. 09-56-02 were consolidated and the different owners and the different municipalities coordinated the presentation of their cases.³

II. Historical Context of the Board's Review of the 2009 TAPS Assessed Value⁴

A. Before 2001

Prior to 2001, no appeals of the TAPS valuation were heard by the Board because the TAPS assessed valuation was set in negotiated settlements between the Division and owners of the TAPS with little, if any, participation by the Municipalities.

B. 2001 TAPS Assessment

In 2001, both the then-owners and the Municipalities appealed the Division's \$2.75 billion assessed valuation of the TAPS. Each party commissioned appraisals of the property. Neither of these appraisals included an updated replacement cost study of the TAPS. Both relied most heavily on projected TAPS tariff income data in setting their valuation estimates. The owners argued that the Division's assessed valuation was too high, while the Municipalities argued that the valuation was too low.

In its 2001 assessment, the Division had considered its own income approach, which it called its TAPS Tariff Settlement Agreement Income Model (TSM). An income approach projects the future income of an income producing property and then discounts that income stream to its present worth. The Division's TSM estimate was based on the assumption that future TAPS tariffs would be set in accordance with the TAPS Tariff Settlement Agreement between the owners and the State of Alaska. The TSM estimate used the Division's future

⁴ Copies of the Board's decisions for the 2005-2008 appeals of the TAPS assessed valuation are found at the Division's Exhibits q-1 through q-4.

³ See Pre-Hearing Order issued April 30, 2009.

TAPS throughput projections, which are the Division's estimates of the number of barrels of oil that will be sent through the TAPS each year that the TAPS will be in production. The TSM estimate resulted in a valuation of the TAPS at \$3.017 billion.

The Division also considered the appraisal prepared for the Municipalities by Tegarden & Associates, Inc. and the appraisal prepared for the owners by Shank & Kinnard (Shank). Both of these appraisals valued the TAPS at less than the TSM estimate, due in part to the appraisers' attempts to reconcile the income approach estimate with values that resulted from other methods of valuation. The Division, in turn, explained that it had attempted to reconcile these two appraisals with its TSM estimate in arriving at its \$2.75 billion assessed valuation of the TAPS.

In 2001, the owners asserted that the "full and true value" of the TAPS under AS 43.56.060(e) was no more than \$2.1 billion, the valuation advocated by the owners' expert, Shank. The owners' appeal focused on lack of weight given to Shank's cost approach and comparable sales approach valuations. A cost approach estimates what it would cost to build or replace a property new, and then adjusts for factors such as depreciation, obsolescence and inflation. A comparable sales approach uses recent sales of similar properties, or partial sales of the same property, to estimate value.

In 2001, the Municipalities argued that the state improperly lowered its valuation of the TAPS from \$3.017 billion to \$2.75 billion. The Municipalities' appraisal from Tegarden & Associates set the 2001 TAPS value at \$2.9 billion. The Municipalities also argued an alternative legal theory that an assessment of \$5.9 billion was appropriate under the second part of AS 43.56.060(e)(2) based on a cost approach using straight-line depreciation of the TAPS.

In 2001, the Board concluded that an income approach was the most reliable methodology for calculating the 2001 TAPS assessed value based on the evidence that had been presented to the Board. Serious problems in both the cost and comparable sales value

estimates of the parties' 2001 experts made those value estimates so much less reliable than the Division's TSM valuation using the tariff income approach that the Board concluded that the TSM valuation was proper for setting the 2001 assessed value of the TAPS.

The 2001 comparable sales value estimates could not be relied on in part because they were based on sales that were not arms-length transactions. Furthermore, the relatively small percentage of total ownership those minority interest sales represented, combined with the inability to assign an accurate control premium, made the attempts to gross-up these small partial sales a very inaccurate measure of the full value of the TAPS.⁵

Because there had never been a replacement cost study for the TAPS, the 2001 cost value estimates had to be calculated based on the original cost of the TAPS. Having to adjust these original costs forward so many years made the valuations based on the original costs a very poor indicator of the 2001 value of the TAPS.⁶

In 2001, the owners also challenged the future TAPS throughput projections in the Division's TSM valuation. The owners argued that the Division should have reduced its best estimate of future TAPS throughput so that these estimates would only include oil that currently met requirements of the definition of "proven reserves" suggested by the owners.

The evidence presented to the Board in 2001 showed that the Division's projections of future throughput for the TAPS, which it used in its TSM model valuation, were clearly the most reliable estimates available to the Division and the Board at that time. In reaching this conclusion, the Board gave weight to the consideration that these estimates were prepared by the state for purposes other than property tax assessments, including revenue forecasts and statewide budgeting. It was apparent that the Division had made every effort to ensure that

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⁵ The control premium is the increased value to a minority interest that would result from owning a controlling interest in the TAPS.

⁶ At the 2008 TAPS hearing, the Owners' Appraiser Kathy G. Spletter, ASA, testified that it is not appropriate to trend a cost study more than five years, because after five years trending becomes too inaccurate for any particular property, and a new cost study is needed to establish an accurate value using a cost approach.

these projections were as accurate as possible.

In 2001, the Board rejected the owners' arguments that lower estimates of future production should be used. The Board concluded that if TAPS throughput estimates were limited to oil that would come from what the owners asserted were the "proven reserves," a large portion of the oil that any reliable projection would include in the future throughput of TAPS would be excluded. The Board noted that AS 43.56.060(e) requires that assessed valuations of the TAPS use its full and true value with "due regard" to its economic value "based on the estimated life of the proven reserves." The Board determined that this statute does not require that a valuation of TAPS ignore future income generated by the transportation of oil, which no one could reasonably dispute would be produced, simply because on the assessment date that oil did not meet the strict definition of "proven reserves" advanced by the owners. The Board concluded that such a reading of the statute would give undue regard to "proven reserves" because it would result in an assessed value that is lower than the "full and true value" of the TAPS.

The Board concluded that the Division's reduction of the 2001 TSM valuation to \$2.75 billion through its reconciliation process resulted in an assessed value that was improper. The Board found that the Division had improperly used what it characterized as reconciliation to reduce its best estimate TSM valuation in order to bring that valuation closer to a projected graph line of historical negotiated TAPS assessments, and closer to valuations that were based on data and methodologies that both the Division and the Board considered much less reliable. The Board ordered that the 2001 TAPS assessed value be adjusted to \$3.017 billion.

C. 2002, 2003 and 2004 TAPS Assessments

From 2001 through 2004, the assessed valuation of the TAPS remained at \$3.017 billion as the result of negotiated agreements between the Division, the Owners and the Municipalities.

D. 2005 TAPS Assessment

The Division's estimated value of the future tariff income stream of the TAPS in 2005 was significantly less than its future tariff income stream estimate in 2001. This was primarily because a decision by the Regulatory Commission of Alaska (RCA) had lowered the amount of tariff that the owners could charge to intrastate shippers of Alaska North Slope oil. This amount was far below the amount previously charged under the TAPS Tariff Settlement Agreement, which still controlled the tariffs for interstate Alaska North Slope oil shipped through the pipeline.

Although most Alaska North Slope oil is shipped out of state and was thus still subject to the TAPS Tariff Settlement Agreement tariff rate, the RCA decision was generally accepted as an indication that Tariff Settlement Agreement tariff rate might be subject to a significant reduction when it would be reviewed by the Federal Energy Regulatory Commission (FERC). This uncertainty about future tariff rates in 2005 led the Division to question whether the income approach using a capitalized estimated future tariff income stream still provided the most complete and reliable estimate of the value of the TAPS. Left with no useful comparable sales data, and no longer willing to rely on an income approach valuation, the Division decided to look at a RCNLD (replacement cost new less depreciation) cost approach. The Division used a cost approach to value almost all other Alaska oil pipelines.

As part of the 2005 TAPS assessment process, in response to a request from the Division, the Owners contracted with Mustang Engineering, L.P. (Mustang) to conduct a replacement cost study of the TAPS. The Owners also had an appraisal of the TAPS done by Stancil & Co. (Stancil). Kathy G. Spletter, ASA, was Stancil's Appraiser. The Stancil appraisal was based on Mustang's replacement cost study and a TAPS tariff income stream valuation.

The Municipalities contracted with R.W. Beck, Inc. (Beck) to review the Mustang replacement cost study. Beck reviewed Mustang's draft report and consulted with Mustang and the Owners' attorneys regarding some issues that Beck had identified in the Mustang report.

Beck produced its own replacement cost report based on the Mustang report and on some of its own investigations. Beck also produced a TAPS valuation estimate based on its review of the information in its own replacement cost study and other information.

The Division's 2005 Assessment set a \$3 billion assessed valuation for the TAPS. The Division's valuation used the Replacement Cost New Less Depreciation (RCNLD) cost approach methodology to value the TAPS. The Division relied on both the Mustang and Beck reports in determining the TAPS 2005 value. The Division explained that it had considered other approaches to valuation, including income, sales comparison, stock & debt, and integrated economic value.

The Board concluded in 2005, as it had in 2001, that it would be improper for the Division to adjust its best estimate of the TAPS value by giving significant weight to approaches of valuation or other indicators of value that were not reliable. The Board agreed with the Division that the 2005 value of the TAPS could no longer be accurately measured by the tariff income approach. The Board found that the regulated tariff income stream did not reflect the total economic value of the TAPS, but only a portion of it. The Board concluded that it would have been improper for the Division to reduce its 2005 assessed valuation of the TAPS to bring it closer to tariff income approach valuations because the uncertainty of future tariff rates and other factors caused the value of future tariff income streams to understate the full and true value of the TAPS. The Board decided that the Division's 2005 assessed valuation of the TAPS at \$3 billion was at the low end of an acceptable value range, but that it should not be adjusted.

E. 2006 TAPS Assessment

In making its 2006 assessment, the Division decided that it should assume that the data and methodology used to calculate the TAPS \$3.0 billion assessed value for 2005 had been correct. The Division made adjustments to the 2005 TAPS data to account for value changes that had occurred over the following twelve months.

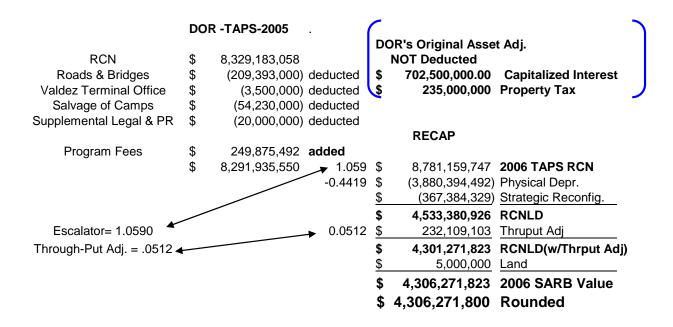
In 2006, both the Owners and the Municipalities appealed the Division's \$3.641 billion assessed valuation of the TAPS to the Board. The Owners argued that the 2006 TAPS value was approximately \$1.5 billion. The Municipalities argued the TAPS assessed valuation should be set at no less than \$6 billion.

In 2006, the Board concluded that capitalized interest and ad valorem tax cost deductions, and a reasonable program manager profit amount, should be added back into the Division's Replacement Cost New (RCN) estimate. The Board concluded that the Division's assumption that it was legally required to divert from standard appraisal methodology to deduct capitalized interest and ad valorem tax costs from its calculation of the TAPS 2006 Replacement Cost New Less Depreciation (RCNLD) was incorrect. The Board concluded that these deductions were not jurisdictional exceptions to the standard appraisal methodology required for valuation of the TAPS as pipeline property in operation.

The Board also concluded that the Division should have included program manager profit costs in its TAPS Replacement Cost New (RCN) estimate. The Board recalculated the Division's RCNLD of the TAPS value to add the two deductions back into the RCN costs and added program manager profit costs. The Board concluded that the resulting value of \$4.3062718 billion should be the 2006 assessed value of the TAPS.

SARB Recap of TAPS 2006 Valuation





F. 2007 TAPS Assessment

In 2007, the Division again decided that it should look to the final assessed valuation of the previous year as the starting point for the valuation from the current year. The Division made adjustments to the data used in the 2006 valuation and followed the methodology approved by the Board in 2006 to account for value changes. The Division revisited the issue of the value of the TAPS Right-of-Way as suggested by the Board in its 2006 determination.

In 2007, the Division made an attempt to correct the historic overestimates of shortterm future throughput. The Division made this correction by removing oil that would come from projects "under evaluation" from its future throughput projections. The Board approved of this correction.

Both the Owners and the Municipalities appealed Division's \$4.578 billion 2007 TAPS valuation to the Board. The Board determined that the Division improperly added its adjustment to the TAPS Right-of-Way value to its RCN estimate, which resulted in the Right-of-Way costs receiving a depreciation reduction that should not have been applied. The Board concluded that the Division's Right-of-Way valuation should be removed from the Division's Replacement Cost New (RCN) estimate, and then added to the Division's RCN less Physical Depreciation, Functional & Economic Obsolescence estimate. The Board recalculated the Division's updated RCNLD of the TAPS value making this change. The Board concluded that the resulting value of \$4.588895312 billion should be the 2007 assessed value of the TAPS.

In 2007, the Board also expressed its concern about the Division's frequent use of the term conservative in reference to some of its assumptions and estimates in its TAPS valuation. The Board reminded the Division that the object of an assessor valuing property under Alaska Statute 43.56.060(e)(2) is to make the best estimate of value, that is, to determine the pipeline's most likely value based on the available evidence, not to make a conservative estimate of value, or the lowest estimate of value within an acceptable range of possible values.

In 2007, the Board found for the third year in a row that the Division's assessed valuation was at the low end of an acceptable range of value for the TAPS.

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⁷ See Graphic showing the Board's 2007 adjustment at page 13.

Board's 2007	Adjustment to	TAPS	Assessed Value
	Division's Original Recap	SARB Change	
RCN	\$8,304,935,550	\$8,276,423,150	Removed ROW from RCN before Depreciation
Inflation Adjusted RCN 15.04%	\$9,553,838,514	\$9,521,197,192	
Depreciation - Physical Deterioration	\$(4,302,873,835)	\$(4,288,347,215)	
RCN Less Physical Depreciation	\$5,250,964,679	\$5,232,849,977	
Functional Obsolescence (Utilization & Scaling)	\$(549,811,217)	\$(549,811,217)	
RCN less Physical Depreciation & Functional Obsolescence	\$4,701,153,462	\$4,683,038,760	
Functional Obsolescence Strategic Reconfiguration	\$(242,639,688)	\$(242,639,688)	
RCN less Physical Depreciation & Functional Obsolescence	\$4,458,513,774	\$4,440,399,072	
Economic Obsolescence	\$ -	\$ -	
RCN less Physical Depreciation, Functional & Economic Obsolescence	\$4,458,513,774	\$4,440,399,072	
ROW	\$19,801,200	\$48,313,600	Add undepreciated ROW Value
RCNLD plus DOR adjustment of \$100,182,640	\$4,578,497,614	\$4,588,895,312	

G. 2008 TAPS Assessment

In 2008, the Division decided that the 2005 Mustang estimates were too old to use to extrapolate the TAPS 2008 assessed value. The Division also hoped that, through a new independent cost study, the Division would be able to investigate some of the troubling issues

that had been identified by the Division and the Municipalities regarding the Mustang study since that study was first produced in 2005.

Before the Division had entered into a contract for a new study, however, the Municipalities informed the Owners and the Division that they would contract with Pro Plus to obtain a re-costing of the 2005 Mustang study. The Division decided to work with the Municipalities and Pro Plus and invite the Owners' input. The Division later characterized the result of the 2008 Pro Plus study as a fresh re-design of the TAPS, even though it was based on the 2005 Mustang study. The Division used the results of the Pro Plus study as its primary basis for its 2008 valuation of the TAPS of \$7.16589746, which was appealed to the Board.

In 2008, the Board found that the Division's decision to generally rely on the 2008 Pro Plus cost study was reasonable, but the Board found that there was excessive contingency in the RCN of the Pro Plus study, which the Division had not adequately addressed. The Division had reduced the Pro Plus contingency by 5%, from 25% in the Pro Plus study to 20%. The Board found that only a 5% contingency factor was justified based on the evidence presented by the parties. The Board concluded that the increased reliability of the new Pro Plus cost study should result in a reduction the contingency percentage used in the Mustang cost study. The Board also identified places in the Pro Plus study where some of the risks that Pro Plus had accounted for through increased contingency appeared to have already been adequately accounted for, such as high contractor profits.

The Board also found that in 2008, the Division had improperly extended the economic end life of the TAPS from 2042 to 2045, which led the Division's depreciation the TAPS to be incorrect. The Board found that the Division had improperly excluded \$171,653,367 from its RCN for access roads. The Board also found that the Division had improperly excluded \$65,000,000 from its RCN for salvage value of construction camps. After making adjustments to correct for these problems, the Board concluded that \$6.15447972 billion should be the 2008 assessed value of the TAPS. The following table shows the Board's adjusted valuation in comparison to the Division's 2008 assessed value of the TAPS.

Board's 2008 Adjustment to	TAPS Assessed	Value	
	<u>Department</u>	<u>SARB</u>	
Environmental & Environmental Permitting 2	79,960,000	79,960,000	
Survey	40,905,200	40,905,200	
Pipeline Materials	2,923,552,800	2,923,552,800	
VMT Materials	512,733,600	512,733,600	600
Pipeline Equipment & Assemblies	6,337,900	6,337,900	
Pipeline Installation	4,704,607,100	4,704,607,100	
VMT Installation	512,733,600	512,733,600	
Pump Facilities	553,047,300	553,047,300	
Meter Stations	15,728,400	15,728,400	
Direct Costs	9,349,605,900	9,349,605,900	
Project/Construction Management, Engineering, Inspection	701,220,400	701,220,443	
Owners' Costs	467,480,300	467,480,295	
Direct Costs plus X., & XI.	10,518,306,600	10,518,306,638	
Contingency	2,103,661,300	525,915,332	
Direct Costs plus X., XI., & XII	12,621,967,900	11,044,221,969	5%
Land and ROW	-	-	
Direct Costs plus X., XI., XII & Land and ROW	12,621,967,900	11,044,221,969	2042
Ad Valorem Tax	298,719,900	298,719,906	
Interest During Construction	1,372,563,300	1,200,992,874	
Total RCN	14,293,251,100	12,543,934,749	
Less Land and ROW	-	-	
RCN Less ROW	14,293,251,100	12,543,934,749	
Valdez Terminal Office Building	(3,000,000)	(3,000,000)	
Salvage of Camps (10%)	(65,000,000)	-	
Access Roads	(171,653,367)	-	
Taxable RCN	14,053,597,733	12,540,934,749	
Depr., Physical	(6,141,942,713)	(5,735,776,358)	
Taxable RCN Less Physical Obsolescence	7,911,655,020	6,805,158,391	
Depr., Functional - Utilization & Scaling (Super Adequacy)	(692,669,362)	(595,795,031)	
Depr., Functional - Strategic Reconf.(Excess Operating Costs)	(228,384,344)	(228,384,344)	
Depr., Economic		-	
Taxable RCN Less All Forms of Obsolescence	6,990,601,314	5,980,979,016	
Land and ROW	175,296,200	173,500,700	
Total RCN as of January 1, 2008	7,165,897,514	6,154,479,716	
Total RCN as of January 1, 2008 - ROUNDED	7,165,897,510	6,154,479,720	

III. 2009 TAPS Assessment Process

For the TAPS assessment process for 2009, the Division used an updated and more detailed Pro Plus replacement cost study of the TAPS. The Division determined that the 2009 Pro Plus study was more accurate than the updated Mustang cost estimates provided by the Owners.

The Division issued a Notice of Assessment, setting the 2009 assessed value for the TAPS at \$7.79478181 billion. The Owners and the Municipalities timely appealed the original assessment. After considering the parties' objections, the Division issued an informal conference decision setting the 2009 assessed value for the TAPS at \$7.71506816 billion. The Owners and the Municipalities timely appealed the Division's informal conference decision to the Board.

At the time the 2009 TAPS appeal was heard by the Board, the Board's decisions in the 2006, 2007 and 2008 TAPS assessments were on appeal in Superior Court. The Board ordered the parties to participate in mediation to explore whether the parties might stipulate that if the Board's prior decisions were overturned by the court, the 2009 assessment would be sent back to the Division for adjustment in accordance with the court ruling, so that at the 2009 assessment hearing, the parties and the Board could focus on issues that were not already before the court. The parties determined that such a stipulation was not practical.

Prior to the hearing, the Chair met with the parties for a pre-hearing conference and issued a prehearing order. Later, the Board met by teleconference to take up a motion to disqualify the Chair. The motion had been filed by the Owners and briefed by the parties. The Board had requested and received an ethics opinion on the issues raised in the motion from the Board's designated ethics supervisor. With Mary Keller acting as chair and Board members Van Sant and Brown participating, the Board voted to deny the Owners' motion.

At the beginning of the hearing, the Board voted to approve the Chair's order denying the Division's motion for rule of law of the case, which had also been briefed by the parties.

After a four-day hearing, the Board took the matter under advisement and deliberated in executive session.

IV. Board's 2009 Findings of Improper Valuation

The Owners and the Municipalities both presented evidence that resulted in different values from those proposed by the Division. After reviewing evidence in the record and the arguments of the parties, the Board found that the \$7.6589746 billion 2009 valuation was improper and should be adjusted.

In contrast to the Board's review of the Pro Plus cost study used for the 2008 TAPS assessed valuation, in reviewing the 2009 TAPS assessed valuation the Board found that the Municipalities, through their witnesses from Pro Plus, met their burden of proof to show that the risk accounted for in its 25% contingency factor was justified and was not accounted for in other places within the 2009 Pro Plus cost study. The Board concluded that the Division's reduction of the Pro Plus contingency was improper.

The Board also found that the Municipalities, through their witnesses from Pro Plus, met their burden of proof to show that the 10% Pro Plus estimate for owners' costs was justified and did not include costs that were not taxable or that were not direct costs of replacing the TAPS.

After recalculating the RCN with a 25% contingency and 10% owners cost, then making adjustments to the RCLN to correct for these increased costs, the Board's adjusted 2009 assessed value of the TAPS is \$9.0458952 billion. The table below shows the adjustments that the Board made to the Division's assessed valuation to arrive at the Board's 2009 RCNLD assessed valuation of the TAPS.

SARB 2009 Adjustments to TAPS Assessed Value

		Scaling	and Utiliza	tion Obsolesce	nce	
Lin	e Pipe, Fittings & F	2/I Const				Calculation Check
\$	5,574,829,512	0.45 0.61	47 1,	096,202,462.00	\$ 4,478,627,0	\$ 4,478,627,052
\$	6,689,795,414	0.45 0.614	47 1,	315,442,952.40	\$ 5,374,352,4	\$ 5,374,352,462
		Increased Obsoles	cence	219,240,490		_ ,
\$	1,192,390,200	Owners Cost at 10)%			
Own	ners Cost increase	Amount (depreciate	ed) \$	314,254,437		
\$	3 353 507 <i>4</i> 38	Contingency at 25°	2/6			
•	ntingency Increase		\$	2,012,158,463		
	Contingency		\$	1,060,608,726		
\/-I	D					
	ue Recap	Direct Costs Issa Ma	ant Engino	oring Eta 9 Own	oro Cooto	
\$		Direct Costs less Mg		ening Etc. & Own	ers Cosis	
Φ Φ		Project Const Mgnm Owners Costs @ 1				
\$ \$ \$ \$ \$ \$ \$ \$ \$. O		
ф ф		Direct Costs less co		& Owners Costs		
<u>\$</u>		Contingency @ 25	<u>/o</u>			
\$	172,493,800					
\$		Ad Valorem Tax				
\$		Interest During Cons	St			
\$	19,804,581,695	RCN				
\$	(9,365,586,683)	Physical Depreciation	on			
\$	10,438,995,011	RCN less Physical [Эер.			
\$	(1,346,353,116)	Original Obsolescer	ice			
<u>\$</u>	(219,240,490)	Additional Functio	nal Obsol			
\$	8,873,401,405	RCNI D				
\$		Land and ROW				
\$	9,045,895,205					
\$ \$		Total RCNLD round	ded as of .	January 1. 2009		
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A. Contingency

The Division had reduced the contingency in the 2009 Pro Plus cost study from 25% to 10% based on its determination that a 10% contingency was more appropriate given the level of detail in the Pro Plus study. The Municipalities' independent Monte Carlo analysis prepared by Gustavson Associates included an estimation that with a 25% contingency, the likelihood of the TAPS costing less to build was virtually none, while the likelihood of it costing significantly more was over 90%. This analysis also indicated that in order for it to be equally likely that the actual replacement cost new of the TAPS would be more or less than the Pro Plus RCN, a 45% contingency factor would be required.

Although the Board did not give a great deal of weight to this Monty Carlo analysis, this report does support the Board's finding that the Division's reduction of the Pro Plus contingency factor from 25% to 10% was improper. The Board is well aware that it adjusted the 25% Pro Plus contingency factor and the Division's 20% contingency factor downward last year to 5%, and that this reduction may have influenced the Division not to adopt the Pro Plus contingency factor in 2009. However, the evidence that the Municipalities provided in support of the 25% Pro Plus contingency factor in the 2008 cost study was not as persuasive and was effectively rebutted by the Owners.

In 2009, the evidence that the Board found to be most persuasive was the explanations of the Municipalities' witnesses who had developed the 2009 Pro Plus study. These witnesses explained to the Board's satisfaction the risks that were accounted for in the 25% contingency factor. It was clear to the Board that, based on their careful assessment of these risks, the 25% contingency factor in the 2009 Pro Plus cost study was justified.

The Board found that these risks were not otherwise accounted for in other cost elements in the study. For example, the Board found that the Municipalities met their burden of proof to show that the cost associated with contractors' risk in the Pro Plus cost study did not include the cost of risks covered by the 25% contingency factor. The Owners failed to

refute this evidence. Instead, the Owners provided evidence that the contractors contacted during the preparation of the Mustang cost study had indicated they would be unwilling to bid on anything other than a cost plus contract for an Alaska TAPS project. The Board found that this evidence indicated that relevant leaders in oil pipeline construction industry believe that there would be a great deal of risk in a TAPS replacement project that they would be unwilling to attempt to quantify and assume.

B. Owners' Costs

The Division reduced the costs attributable to the owners of the replacement TAPS to half of the amount estimated for this cost in the Pro Plus study. This reduction from 10% to 5% was due to the Division's concern that the 10% for owners' cost in the Pro Plus study may have included costs that were not taxable or were not directly related to the cost of construction.

The Board found that the Municipalities met their burden of proof to show that the Pro Plus 10% for owners' cost was justified through their witnesses from Pro Plus, and this evidence was not effectively rebutted by either the Division or the Owners. The Board found particularly persuasive the testimony for the Municipalities' witnesses on the importance, in a project like the TAPS, of having personnel from the owners to shadow contractor personnel and closely monitor the ongoing construction work in order to limit delays and cost over-runs.

V. Parties' Failure to Show that Valuation Should be Further Adjusted

The Board concluded that only the adjustments discussed above should be made to the Division's updated 2009 assessed value of the TAPS. The Board concluded that neither the Municipalities nor the Owners had met their burdens of proof to show that, applying the standard of review set out in AS 43.56.130(f), the Board should make any additional adjustments to the Division's updated 2009 assessed value of the TAPS.

The Board found the Division's 2009 TAPS assessment process included a much more thorough review of a much more detailed, improved and updated Pro Plus cost study. The reasons that the Board had less confidence in elements of the 2008 Pro Plus study were primarily the result of the difficult time constraints imposed on Pro Plus and the parties in developing and reviewing the new cost study for that year. Both the Municipalities and the Division took advantage of the work that was done for the 2008 assessment and moved beyond that to more carefully complete, update and refine the Pro Plus cost study for the 2009 assessment. Both the Municipalities and the Division also used the time before the 2009 assessment to subject the 2009 updated Pro Plus cost study to a thorough and open review.

The Board again recognized that in setting an assessed value for a property as difficult to value accurately as the TAPS, the assessing authority--the Division--must exercise its independent judgment in weighing the evidence and choosing between conflicting data, value indicators and valuation methodologies to arrive at its best estimate of value. Alaska Statute 43.56 charges the Division, not the Board, with the initial responsibility to take these steps to arrive at its best estimate of value. In 2008, the Board was tasked with an appeal of the Division's effort to review a completely new and somewhat incomplete cost study for the replacement of the TAPS. In 2009, the Board had much more confidence in the evidence supporting the accuracy of that study, as it had been completed and improved over the intervening months.

While the adjustments that the Board made, which more closely reflect the RCN developed in that study, significantly increase the taxable value of the TAPS, the Board is confident that it is the most accurate value that can be achieved based on the evidence presented to the Board. Because the quality of the information used to value the TAPS improved from 2008 to 2009, the increase in the Board's assessed valuation was not solely dependent on actual changes in the value of the assessed property.

A. Municipalities' Case

The Municipality asked the Board to focus its review of the Division's 2009 assessed valuation on five areas where the Division did not adopt Pro Plus recommendations. These five areas were: (1) the contingency; (2) owners' costs; (3) the TAPS economic end life; (4) scaling, and (5) the Valdez Marine Terminal (VMT) cost update. As noted above, the Municipalities met their burden of proof to show that the Division's deviation from the Pro Plus cost study was improper for the first two of these five issues. The other three are evaluated below.

1. Economic End Life

In 2009, Board found that the Division properly maintained the economic end life of the TAPS at 2042. There are two components to the projection of the economic end life of the TAPS. The first is the projection of future throughput. This requires both an estimate of the amount of oil that is likely to be transported through the TAPS in future years, and an estimate of when the oil will be available for transportation through the TAPS. The second component of the end life is an estimate of the minimum daily throughput that can be maintained by the TAPS. Once the oil fields that the TAPS serves can no longer provide enough oil to maintain the minimum daily throughput for the TAPS, its economic life will end.

a. Throughput Projections

In its 2006 decision on the TAPS appeal, the Board found that the Division's conclusion that the TAPS would be able to maintain a minimum throughput of 200,000 barrels per day was adequately supported by the evidence in the record. In 2006, the Board also concluded that the Division properly adjusted its valuation to reflect its current best estimate of the TAPS economic life as running to 2042.

In its 2007 decision on the TAPS appeal, the Board approved of the Division's attempt to correct its historic slight trend of short-term overestimates of future TAPS throughput. The Division made this correction by removing oil that would come from projects "under evaluation" from its future throughput projections. In 2007 the Board found that this adjustment was reasonable. With this adjustment to its future throughput estimates, the Division estimated that the economic end life of the TAPS would remain 2042.

In 2008, the Division decided to move its estimate of the economic end life back to 2045. This change was based primarily on the Division's decision to add oil that would come from projects "under evaluation" back into its future throughput projections. In 2008, the evidence submitted by the parties did not persuade the Board that an increase or decrease in the economic end life, from the date used in 2006 and 2007, was appropriate as of the January 1, 2008 date of valuation. In 2008, the Board found that putting the "under evaluation" oil back into the projections was not justified as of that date.

The Board agreed with the Division's decision in 2009, consistent with its decision in 2007, not to include oil that would come from projects "under evaluation" in its future throughput projections. The Board also considered the Division's decision to exclude oil that would come from projects "under evaluation" from its throughput projections to be consistent with the Superior Court's rulings on the significance of the term "proven reserves" in AS 43.56.060(e)(2) and 15 AAC 56.110(c). Given the limited information available to the Division, excluding reserves that are "under evaluation" for development is a reasonable way to base the TAPS value on proven reserves that were technically, economically and legally deliverable as of the assessment date.

b. Minimum Throughput Limitations

The Municipalities first provided persuasive evidence that the TAPS minimum mechanical throughput could be extended far below 200,000 barrels per day. The Owners then effectively rebutted this evidence. The Owners provided evidence that significant problems

would result from running the TAPS, as it is currently configured, if throughput is reduced below 200,000 barrels per day. There was not adequate evidence presented at the hearing to show that the Division's estimate of the economic end life of the TAPS was improper. When it becomes clearer how the Owners are going to deal with low flow problems and what it will cost to cure these problems, it will be appropriate for the Division to extend the economic end life of TAPS. The job of the assessor, in this case the Division, is to value the pipeline that was actually there on the assessment date.

The Board recommends that the Division thoroughly review the economic end life of TAPS every year. As the Board stated in its 2008 TAPS decision, it will likely be proper to extend the estimated economic end life of the TAPS past 2042 in future assessments as additional oil reserves on the North Slope become economically extractable or the estimated minimum mechanical throughput of the TAPS is reduced below 200,000 barrels per day.

2. Scaling

The Board found that the Municipalities failed to meet their burden of proof to show that the Division improperly accounted for super-adequacy in the TAPS. The Board found that the Division was correct in its determination that the original pipeline was designed to have greater throughput capacity than the Owners' current needs. The Board also found that the approach that the Division took to account for this functional obsolesce was reasonable and consistent with standard appraisal methodology. The Board recognized that there was merit to some of the points made by the Municipalities' appraiser, but concluded that he had not adequately accounted for the decrease in the TAPS value that that can be attributed the difference between the TAPS' original design capacity and its present and projected throughput.

3. VMT and Other Cost Updates

The Municipalities argued that the Division's RCN should be increased by \$31.369

million due to some corrections that were made to the spread sheet after the Pro Plus study was submitted to the Division. The Division also argued that the assessed value of the Valdez Marine Terminal should be increased from \$2.042 billion to \$2.557 billion as a result of an update to the Lloyd Engineering component of the 2009 cost study. This update added significant amounts of crushed rock for a large area of waterfront fill and compacting, and other cost that were part of the original construction of the VMT.

These costs had not been accounted for in original 2009 cost estimate provided to the Division. The Division had declined the Municipalities request to add these cost to the TAPS RCN for 2009 in its informal conference decision due to lack of adequate time to properly review the information supporting them.

At the hearing, the Owners presented evidence that some of these original VMT costs would be unnecessary to replace the TAPS if it were rebuilt to meet the needs of the Owners as of the assessment date. The Owners argued that these costs did not add to the value to the TAPS in 2009.

The Board found that the Municipalities failed to meet their burden to show that it was improper for the Division not to include these late filed costs in its 2009 assessed valuation. The Board agreed with the Municipalities that a material site was needed for the VMT construction, but the extent to which the construction that led to these late added costs was still necessary was not clear from the evidence presented. In short, the Board was not persuaded either by the Owners or the Municipalities as to whether it would have been appropriate for the Division to have added these late filed costs to the 2009 TAPS RCN. The Division's determination on this issue must therefore stand. The Board recommends that the Division carefully review these costs during its 2010 assessment process.

B. Owners' Case

The Owners argue that the increased assessed value of the TAPS from \$3 billion in

2005 to \$7.715 billion in the 2009 is simply not justified given the decline in throughput, the decline in the tariff income, and the aging of pipeline during those four years.

The Owners also argue that the Division's assessed value improperly includes the value of the "shipper's interest" which is not taxable property. The Owners assert that the Division did not apply the correct standard of valuation, should not have relied solely upon its RCNLD valuation, and failed to properly account for functional and economic obsolescence. The Owners also took issue with the Division's decision to rely on the Pro Plus study.

The Owners maintain that deductions for the costs of roads and bridges, capitalized interest during construction and ad valorem taxes paid during construction from the RCN were jurisdictional limitations that the Division failed to apply.

1. Increases in Assessed Value

The Board recognizes that the Owners are concerned about the increase in the assessed valuation that has occurred over the past four years. The Board believes that the best way to achieve equity in assessments is for the assessor to value taxable property accurately. The Board is confident that these increasing assessed valuations are well supported by both the law and by the facts presented to the Board.

These increases seem less counter-intuitive when one considers the large increases in the costs of construction for projects like the TAPS, increases in the cost of the commodity transported by the TAPS, increases in exploration, investment in recovery technology, and the likelihood of increases in the amount of reserves that will be economically recoverable.

Furthermore, some of the growth in the assessed value is less directly due to the increasing value of the TAPS than to improvements in the assessments. There have been significant improvements in the data relied on to value of the TAPS. Improvements to the cost estimates and the removal of purported jurisdictional limitations that were not consistent with Alaska law or standard appraisal methodology have increased the assessed value of the TAPS

by bring the assessed value closer to its true and full value.

2. Division's Valuation Methodology

The Board disagreed with the owners' criticism of the Division's valuation methodology. The Board agrees with the Division that the term "economic value" in AS 43.56.060(e)(2) is broader than merely the income approach to valuation, and encompasses value that is not accounted for in the TAPS tariff income. The Board disagrees with the Owners' assertion that the Division is attempting to include the value of a "shippers' interest" in its assessed value of that TAPS.

Identifying a spread of value between a hypothetical unregulated income stream and the tariff income stream is not the same as basing the assessed value on that hypothetical unregulated income stream. The Board recognizes that it is appropriate for the Division to attempt to identify reasons for the difference in value that result from the sales, income and cost approaches to valuing different properties. This is especially important when there are great differences in the values that result from using these different approaches, as there are in the case of the TAPS. Identifying the reasons for the different values that result from different approaches is simply one step in checking the accuracy of those values and determining how much weight to give the values indicated by those approaches. The Division did not make, or rely on, a market tariff income approach valuation of the TAPS.

The goal in considering the values indicated by different valuation approaches is to determine the weighting, if any, that should be given the values indicated by each approach to provide the most accurate value of the property. In valuing Alaska oil transportation pipelines in production like the TAPS for taxation purposes, both the law and standard appraisal methodology require that that weighting take into consideration the oil reserves the pipeline serves. Generally, this consideration will increase weighting to a cost approach to valuation because the value of those properties is primarily dependent on their utility in transporting oil from those reserves. These Alaska properties do not sell as stand alone properties, nor do they

generate an independent income stream that reflects the value of their utility in transporting oil. Neither the comparable sale nor income approaches to valuation are therefore likely to provide these properties' true and full value.

The Board respectfully disagreed with the Owners' experts who assumed that the TAPS was built and is owned for its tariff income. The income approach is typically used for the valuation of income producing property, but the TAPS was not built for the tariff income that it produces. The Owners correctly pointed out that, in general, value is not affected by who owns the property, because generally a property is owned by the party willing to pay the most for it. However, the *reason* the property is owned does affect the value, and can affect which method of valuation is more likely to produce a value that is the full and true value.

The Owners gave the example of a property that was subject to rent control as a way in which government regulation can lower the taxable value of a property. If indeed the owners and the most motivated potential purchasers of rental property in a rent controlled market are interested in the property for its income stream, then an income approach to valuation might be the approach that should be given the most weight in reaching a value. Furthermore a decrease in the projected income stream that resulted from the impact of rent control would lower a value based on a rent-controlled projected rental income stream valuation. A rental income valuation would most likely be used for properties where rental income was the primary motivation for ownership such as apartment buildings.

If, on the other hand, the assessed property was a single family home, and there was a rent controlled rental market for single family homes, but the primary motivation for owning homes in that market was to be an owner-occupier rather that a landlord, an income approach valuation based on the potential rent controlled rental income stream might have little relation to the properties' actual value, which would be best obtained through a comparable sales approach valuation. Furthermore, it would not be appropriate to decrease a comparable sales valuation for single family properties in this owner-occupant driven market through an

economic obsolescence adjustment to bring the value closer to a rent-controlled rental income stream valuation.⁸

Similarly, the tariff income approach valuations of TAPS do not reflect its actual value for the reasons discussed in the prior Board decisions dealing with this issue. The TAPS is part of an integrated system that includes the Alaska North Slope gas and oil reserves it delivers to Valdez. The TAPS value, as part of that income-producing system, now exceeds the present value of its future tariff income stream. Valuations of the TAPS based on its tariff income stream are not now reliable indicators of the TAPS' full and true value, and they will become less so as time goes on, because the tariff is reduced to reflect accelerated depreciation of the original cost of constructing the TAPS.

The 2009 TAPS tariff income valuations were based on assumptions that are incorrect when applied to the TAPS. As the Municipality pointed out in its closing argument, there is no evidence that any purchaser has ever purchased any interest in TAPS for its tariff income stream. The Board again found that the alignment of ownership between the owners of ANS reserves and ownership of the TAPS, and the lack of ownership in TAPS by any party with no up or downstream interest ANS production, was persuasive evidence that the value of the TAPS tariff income steam was not motivating the ownership of the TAPS.

While standard appraisal techniques require consideration of each of the three standard approaches to valuation—the income, cost, and comparable sales approaches—there is no requirement that estimates of value arrived at by using any one or two of these approaches be given weight in arriving at a final valuation. The Board found that it was reasonable for the Division not to give any weight to the values indicated by the sales and income approach valuations considered by the Division. Except for some increase in predictability of future tariff rates, the 2009 tariff income approach valuations suffer from the same problems that led

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⁸ There might be other factors that would make the controlled rental income stream an unreliable indicator of value even for rental properties like an apartment building, such as speculation that rent control might change in some way or a trend to convert apartment to owner-occupied condominiums.

the Division to properly give income approach valuations no weight in its valuation of the TAPS from 2005 through 2008.

The 2009 comparable sales value estimates could not be relied on due to the same problems that these valuations have suffered from since they were first considered in the 2001 TAPS assessment. There are no other pipeline properties that are similar enough to the TAPS to obtain an accurate assessed value from sales. The historical partial sales of the TAPS were not arms-length transactions and were not independent of other transactions between the buyer and seller. Grossing up small partial sales creates distortions in the values obtained.

As a matter of equity, the Board found it significant that the Division values all other pipeline property using the cost approach. The Division's use of cost approach valuation using a new cost study in the case of the TAPS, as opposed to merely trending original costs as the Division does in the case of other Alaska pipelines, treats the owners of TAPS fairly relative to other Alaska production pipeline owners. The fact that the TAPS produces a tariff income in addition to transporting oil would not justify reliance on an income approach, as opposed to the generally applied cost approach, because oil transportation, not the TAPS tariff income stream, is the motivation for ownership of the TAPS. The Division's use of the cost approach is consistent with the principle of substitution. The cost approach provides a method of capturing an Alaska pipeline's value based on the cost of acquiring an equally desirable and valuable substitute pipeline. By using this approach, the pipeline's value can be easily and accurately adjusted to reflect its dependence on the oil reserves that set the limit on that pipeline's economic life.

3. Pro Plus Cost Study

The Board approved of the Division's decision to rely on the Pro Plus cost study for its 2009 assessed valuation. The Board's only adjustments are two of the areas where the Board

⁹ See Division's exhibit d-18 at page 2.

found that it was improper for Division not to use numbers in the Pro Plus cost study. The Board concluded that the Municipalities met their burden to show that the Pro Plus cost study provided a reliable estimate of the TAPS RCN.

The Board also concluded that that the Mustang study significantly undervalued the TAPS RCN. The Board was particularly impressed with the comparison of the 2009 Mustang RCN to the untrended original cost of the TAPS construction. The Board simply did not find it plausible that a replacement for the TAPS could have been built in 2009 for close to what it cost to build originally more than 30 years ago. The Board found that the trended original cost of the TAPS is a valuable indicator that the Pro Plus RCN TAPS is correct. The Mustang estimate simply failed to pass this test. ¹⁰

4. Jurisdictional Limitations

The Board agreed with Judge Gleason's reasoning in upholding the Board's prior ruling that capitalized interest during construction and ad valorem taxes paid during construction were not costs that should be deducted from the RCN of oil transportation pipelines in production, such as the TAPS on the assessment date. The Board was not persuaded by the Owners' arguments that it should revisit its 2008 ruling that the costs of access roads and bridges for the TAPS that are still primarily dedicated to pipeline operation should be included in the RCN.

VI. Conclusion

The Board concluded that the Municipality provided the Division with an excellent updated cost study of the TAPS Replacement Cost New as of January 1, 2009. The Division and the Municipalities made a careful, open, and thorough review of this study. The Division

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¹⁰ See the \$23.3676 billion estimated original cost of the TAPS trended using Marshall & Swift at the Division's demonstrative exhibit aa, page 64 of 127, which compares favorably with the Board's adjusted \$19.8045 billion RCN.

correctly chose to base its assessed value on this study. The Division reached reasonable

conclusions analyzing the information in this study as well as information on other approaches

to value, in accordance with standard appraisal methodology, to obtain its 2009 estimate of the

TAPS value.

Based on the evidence presented, the Board concluded that the Division's failure to

adopt the Pro Plus contingency factor and owners' costs was improper. The Board found that

with these exceptions, the evidence presented did not show that the Division's value was

unequal, excessive, improper or otherwise contrary to the standards set out in AS 43.56. The

Board concluded that Division's 2009 assessed valuation of the TAPS, set at \$7.71506816

billion, should therefore be adjusted. The resulting value, \$9.0458952 billion, is now set as the

2009 assessed value of the TAPS.

Pursuant to AS 43.56.130(g), the undersigned, on behalf of, and as Chair of, the

State Assessment Review Board, certifies to the Department of Revenue, State of Alaska, that

the Board has made its determination as stated in this Certificate of Determination.

DATED: June 4, 2009

Signed

Don Martin McGee

State Assessment Review Board

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[This document has been modified to conform to technical standards for publication.]

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