

**BEFORE THE STATE ASSESSMENT REVIEW BOARD  
STATE OF ALASKA**

In the Matter of:	)	
	)	Appeal of Revenue Decision
THE TRANS-ALASKA PIPELINE SYSTEM	)	No. 10-56-12
	)	
Oil & Gas Property Tax (AS 43.56)	)	OAH No. 10-0193-TAX
<u>2010 Assessment Year</u>	)	

**CERTIFICATE OF DETERMINATION**

The State Assessment Review Board (Board) convened from May 17, 2010 through June 1, 2010, to hear and deliberate on the AS 43.56 appeals of the 2010 assessment of the Trans-Alaska Pipeline System (TAPS). Chair Don (Marty) M. McGee and members Mary (Mickey) E. Keller, Michael B. Salazar and Ronald E. Brown 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.<sup>1</sup>

The TAPS owners, ConocoPhillips Transportation Alaska, Inc., Exxon/Mobil Pipeline Company, Koch Alaska Pipeline Company, BP Pipelines (Alaska) Inc., and Unocal Pipeline Company (collectively, the Owners) were represented by attorneys F. Steven Mahoney and Michael R. Garatoni. Assistant Attorney General Kenneth J. Diemer, attorney Robert M. Johnson and Alaska Petroleum Property Tax Assessor James H. Greeley represented the Alaska Department of Revenue Tax Division (Division). The municipalities appealing the Division's 2010 TAPS assessment (Municipalities) were represented by attorneys Craig Richards for the City of Valdez, Robin O. Brena for the Fairbanks North Star Borough, and Mauri Long and Jessica Dillon for the North Slope Borough.

**I. Introduction**

The subject of this appeal is the Division's Revenue Decision number 10-56-12, which set a \$9.20346143 billion assessed valuation for the TAPS as of January 1, 2010. The Division used the

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

cost approach to arrive at its assessed valuation. The Owners argued that the 2010 TAPS value was no more than \$1.4 billion. The Municipalities argued the TAPS assessed valuation should be set at \$11.8119595 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 has determined that with two exceptions the \$9.20346143 billion assessed valuation in the Division's Revenue Decision was consistent with the standards set out in AS 43.56 and was not unequal, excessive, or improper.

The Board has found that the Division used the wrong method to calculate the cost of ad valorem taxes during construction and improperly failed to provide a coherent methodology for its determination of the economic end-life of the TAPS. The Board has determined that the 2010 assessed valuation of the TAPS should be adjusted to \$9,638,669,398.<sup>2</sup>

#### **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. The TAPS is the single conduit for the transportation of petroleum from America's most productive petroleum region. Construction of the TAPS was completed in 1977. Upon completion predicted economic life of the TAPS was approximately thirty years. However, thirty years later, in 2008, the expected economic life of the TAPS was predicted by the Division still to be at least thirty years in the future.

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

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<sup>2</sup> See Graphic showing the Board's 2010 adjustments at page 22.

taxable property is also located in the Municipality of 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. 10-56-12. This Informal Conference Decision set the 2010 assessed value for the TAPS at \$9.20346143 billion.

**D. Consolidation and Coordination of Appeals**

For the appeal before the Board of the Division's 2010 assessment of the TAPS, the Owners' and the Municipalities' appeals of Revenue Decision No. 09-56-12 were consolidated and the different owners and the different municipalities coordinated the presentation of their cases.<sup>3</sup>

**II. Historical Context of the Board's Review of the 2010 TAPS Assessed Value**

**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.

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<sup>3</sup> See Pre-Hearing Order issued April 29, 2010.

## **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 appraisers 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 TAPS throughput projections. These throughput projections were the Division's best estimates at that time of the number of barrels of oil that would be sent through the TAPS each year that the TAPS would 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 their income approach estimates 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 2001 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.<sup>4</sup>

Because there had never been a replacement cost study for the TAPS, the 2001 cost approach 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 these cost approach valuations very poor indicators of the 2001 value of the TAPS.<sup>5</sup>

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<sup>4</sup> The control premium is the increased value to a minority interest that would result from owning a controlling interest in the TAPS.

<sup>5</sup> 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

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 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

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property, and a new cost study is needed to establish an accurate value using a cost approach.

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 a 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). The 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.

The table below, from the Board's 2006 Certificate of Determination, shows the adjustments that the Board made to the Division's RCNLD calculation.

## SARB Recap of TAPS 2006 Valuation

\$ 8,329,183,058	0.03	\$ 249,875,492	Program Fees
		1.059	
		<b>264,618,145.75</b>	Program Fees Profit @ 3% escalated by 1.059

### DOR -TAPS-2005

RCN	\$	8,329,183,058	
Roads & Bridges	\$	(209,393,000)	deducted
Valdez Terminal Office	\$	(3,500,000)	deducted
Salvage of Camps	\$	(54,230,000)	deducted
Supplemental Legal & PR	\$	(20,000,000)	deducted

<b>DOR's Original Asset Adj.</b>	
<b>NOT Deducted</b>	
<b>\$ 702,500,000.00</b>	<b>Capitalized Interest</b>
<b>\$ 235,000,000</b>	<b>Property Tax</b>

### RECAP

Program Fees	\$	249,875,492	<b>added</b>		
	\$	8,291,935,550		1.059	\$ 8,781,159,747
				-0.4419	\$ (3,880,394,492)
					\$ (367,384,329)
					\$ <b>4,533,380,926</b>
					RCNLD
					\$ 232,109,103
					Thruput Adj
					\$ <b>4,301,271,823</b>
					RCNLD(w/Thruput Adj)
					\$ 5,000,000
					Land
					\$ <b>4,306,271,823</b>
					2006 SARB Value
					\$ <b>4,306,271,800</b>
					Rounded

Escalator= 1.0590  
Through-Put Adj. = .0512

### 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 short-term future throughput. The Division made this correction by removing oil that would come from projects in its “under evaluation” category 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.

The table below, from the Board's 2007 Certificate of Determination, shows the adjustments that the Board made to the Division's RCNLD calculation.

<b>Board's 2007</b>	<b>Adjustment to</b>	<b>TAPS</b>	<b>Assessed Value</b>
	<b>Division's Original Recap</b>	<b>SARB Change</b>	
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 billion, 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% 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 found that in 2008, the Division had extended the economic end life of the TAPS from 2042 to 2045 without a rational justification, 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, from the Board's 2008 Certificate of Determination, 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	
	Department		SARB
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	
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	
<b>Direct Costs</b>	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	
<b>Direct Costs plus X., &amp; XI.</b>	10,518,306,600	10,518,306,638	
Contingency	2,103,661,300	525,915,332	5%
<b>Direct Costs plus X., XI., &amp; XII</b>	12,621,967,900	11,044,221,969	
Land and ROW	-	-	
<b>Direct Costs plus X., XI., XII &amp; Land and ROW</b>	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	
<b>Total RCN</b>	14,293,251,100	12,543,934,749	
Less Land and ROW	-	-	
<b>RCN Less ROW</b>	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)	-	
<b>Taxable RCN</b>	14,053,597,733	12,540,934,749	
Depr., Physical	(6,141,942,713)	(5,765,776,358)	
<b>Taxable RCN Less Physical Obsolescence</b>	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	-	-	
<b>Taxable RCN Less All Forms of Obsolescence</b>	6,990,601,314	5,980,979,016	
Land and ROW	175,296,200	173,500,700	
<b>Total RCN as of January 1, 2008</b>	7,165,897,514	6,154,479,716	
<b>Total RCN as of January 1, 2008 – ROUNDED</b>	<b>7,165,897,510</b>	<b>6,154,479,720</b>	

## **H. 2009 TAPS Assessment**

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 of the 2009 TAPS appeal, the Board's decisions in the 2006, 2007 and 2008 TAPS assessments were on appeal in Superior Court. Before the 2009 hearing, the Board ordered the parties to participate in mediation. The primary goal of the mediation was to determine whether the parties would agree that the 2009 assessment would be sent back to the Division for adjustment in accordance with the court rulings if the Board's prior decisions were overturned by the court. It was hoped that such an agreement would allow the parties and the Board to focus on issues that were not already before the court. The parties determined that such a stipulation was not practical.

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. The Owners and the Municipalities both presented evidence in support of their positions. 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.

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 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.

In 2009, the evidence that the Board found to be most persuasive on the issue of the propriety of the 25% contingency 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 the evidence showing that it was reasonable to include a 25% contingency cost in the RCN. 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.

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 and this evidence was not effectively rebutted by either the Division or the Owners.

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 was \$9.0458952 billion.

The table below, from the Board's 2009 Certificate of Determination, 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 Utilization Obsolescence

**Line Pipe, Fittings & P/L Const.**

\$	5,574,829,512	0.45	0.6147	1,096,202,462.00	\$ 4,478,627,050
\$	6,689,795,414	0.45	0.6147	1,315,442,952.40	\$ 5,374,352,462

Calculation Check

\$ 4,478,627,052  
\$ 5,374,352,462

**Increased Obsolescence      219,240,490**

**\$ 1,192,390,200 Owners Cost at 10%**  
**Owners Cost increase Amount (depreciated)      \$ 314,254,437**

**\$ 3,353,597,438 Contingency at 25%**  
**Contingency Increased Amount      \$ 2,012,158,463**  
**Contingency Depreciated      \$ 1,060,608,726**

**Value Recap**

\$	11,923,902,000	Direct Costs less Mgmt. Engineering Etc. & Owners Costs
\$	894,292,650	Project Const Mgmt Etc.
\$	<b>1,192,390,200</b>	<b>Owners Costs @ 10%</b>
\$	14,010,584,850	Direct Costs less contingency & Owners Costs
\$	<b>3,502,646,213</b>	<b>Contingency @ 25%</b>
\$	172,493,800	ROW/Land
\$	423,964,360	Ad Valorem Tax
\$	1,694,892,472	Interest During Const
\$	<b>19,804,581,695</b>	<b>RCN</b>
\$	<b>(9,365,586,683)</b>	<b>Physical Depreciation</b>
\$	<b>10,438,995,011</b>	<b>RCN less Physical Dep.</b>
\$	<b>(1,346,353,116)</b>	<b>Original Obsolescence</b>
\$	<b>(219,240,490)</b>	<b>Additional Functional Obsol</b>
\$	<b>8,873,401,405</b>	<b>RCNLD</b>
\$	172,493,800	Land and ROW
\$	<b>9,045,895,205</b>	
\$	<b>9,045,895,200</b>	<b>Total RCNLD rounded as of January 1, 2009</b>

### **III. 2010 TAPS Assessment Process**

For the TAPS assessment process for 2010, the Division originally used the untrended 2009 RCN with adjustments. The Division issued a Notice of Assessment, originally setting the 2010 assessed value for the TAPS at \$9.38189485 billion. The Owners and the Municipalities timely appealed the original assessment.

The Division considered the appeals filed by the Owners and the Municipalities in issuing Revenue Decision number 10-56-12. The Division made adjustments to its original 2010 valuation based on information taken into account during the informal conference process. The primary new challenge to the 2010 assessment, which had not been made against assessments in appeals for earlier years, was the new cost study that had been prepared for the Owners by Stantec, a Canadian engineering firm. The Owners submitted this study as evidence that the assessed value of the TAPS should be reduced. Stantec worked closely with the Owners and some employees of the company that runs the TAPS for the Owners, Alyeska. The Stantec study estimated the cost of a thirty-inch diameter pipeline, which the Owners argued would more efficiently serve the Owners current needs than the 48-inch diameter TAPS.

After considering the parties' objections to the original assessment, the Division issued its revenue decision setting the 2010 assessed value for the TAPS at \$9.20346143 billion. The Division gave no weight to the new Stantec cost study. The Owners and the Municipalities timely appealed the Division's revenue decision to the Board.

At the 2010 hearing, the Owners argued that the 2010 TAPS value was no more than \$1.4 billion. The Municipalities argued the TAPS assessed valuation should be set at \$11.8119595 billion. The Owners and the Municipalities both presented evidence in support of their positions.

On May 24, 2010, after the public portion of the Board's hearing on the 2010 assessed value of the Trans-Alaska Pipeline System (TAPS), but before the Board's deliberations were complete, the Alaska Superior Court issued a decision following trial de novo on the appeal of the

2006 Assessed Valuation of the Trans Alaska Pipeline System.<sup>6</sup> The parties were given an opportunity to provide briefing on the court's decision. The Board reviewed the court's decision and the parties' briefing. The transcripts of the proceedings before the Superior Court had previously been provided to the Board as Exhibit H of the Municipalities' exhibits.

The Board concluded that it should consider the court's decision in its review of the appeals of the 2010 TAPS assessment. The Board did not apply the doctrine of collateral estoppel because the decision is not yet final. However, after reviewing the court decision with the other evidence in the record, the Board made a determination that it concluded was consistent both with what the Court decided in the 2006 appeal and the evidence presented for the appeal of the 2010 assessment.

The Board believes the result in the Court's decision in the 2006 appeal demonstrated the importance of the legislature's decision to provide in statute for a trial de novo for appeals to Superior Court of AS 43.56 assessments. The Board agreed that the Court was able to make a valuation of the TAPS that was much closer to its true and full economic value at the 2006 assessment date than the Division or the Board did.

Due to the provision for trial de novo, the Court was able to apply what has been learned by the Board and the parties over the years since the 2006 TAPS assessment appeal was decided by the Board. An important benefit of the statutory provision for de novo review was the Court's ability to review the Pro Plus cost study, which the Board did not have for the 2006 appeal, as well as the ability to review the evidence of the reliability of the Pro Plus cost study relative to the Mustang cost study. In addition, the Court was able to review relevant evidence that was not provided to the Board at the time of the 2006 assessment due to time constraints, lack of the use of subpoena power by the Division, and the lack of time or authority for the Board to order discovery.

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<sup>6</sup> Alaska Superior Court Case No. 3AN-06-8446-CI.

Having reviewed both the evidence and arguments provided for the hearing on the 2010 assessment and the Court's decision on the 2006 TAPS assessment, the Board determined that while the Division's \$9.20346143 billion valuation was fundamentally sound, there were two components of that valuation that were improper and should be adjusted. The Board found that the Division used the wrong method to calculate the cost of ad valorem taxes during construction, and that the Division failed to provide a coherent methodology for its determination of the economic end-life of the TAPS. The Board concluded that no adjustment needed to be made to the Division's scaling calculation despite a slight difference in the way that the Court and the Division addressed the issue of accounting for super-adequacy through scaling.

The Board determined that the best estimate of the economic end life of TAPS as of the 2010 assessment date is 2045, in contrast to both Division's estimate of 2042 and the Court's finding for the 2006 assessment of 2047. The Board agreed with and applied the Division's and the Court's methodology for accounting for super-adequacy of the TAPS due to reduced throughput through scaling, but agreed with the Division that for the 2010 valuation only the pipeline needed to be scaled because strategic reconfiguration has removed super adequacy due to low throughput from other components of the TAPS. The Board agreed with the methodology put forward by the Municipalities for the correct calculation of the cost of ad valorem taxes during construction, which is an issue that was not dealt with on its merits by either the Court or the Division. Having made these adjustments to the Division's RCNLD valuation, the Board determined that the 2010 assessed valuation of the TAPS should be set at \$9,638,669,398.

The table below shows the adjustments that the Board made to the Division's assessed valuation to arrive at the Board's 2010 RCNLD assessed valuation of the TAPS, as well as the differences between the 2006 assessed valuation by the Court and the Board's 2010 adjusted value.

## SARB TABLE 1

<u>2006 ITEM</u>	<u>2006 DECISION</u>	<u>2010 DECISION</u>	<u>2010 ITEM</u>	<u>CHANGES</u>
RCN	\$18,712,247,300	\$20,601,319,098	RCN	
AD VALOREM TAX	\$0	\$185,782,535	AD VALOREM TAX	ADDED MUNI CALCULATION
CONSTR. INTEREST	\$0	\$21,091,520	CONSTR. INTEREST	ADDED MUNI CALCULATION
ADJ RCN (NO CHANGE)	\$18,712,247,300	\$20,808,193,153	ADJ RCN	
MINUS R.O.W.	-\$170,907,600	-\$180,793,400	MINUS R.O.W.	
NON-TAXABLE	-\$74,200,000	\$20,627,399,753	LESS ROW	
RCN LESS ROW & NON-TAX	\$18,467,139,700	1.010042	RCN INDEX FOR PIPE	
PHYSICAL DEPRECIATION	-\$7,307,447,179	-\$9,626,119,885	PHYSICAL DEPRECIATION	PHYSICAL DEPR TO 2045
RCN LESS PHYSICAL	\$11,159,692,521	\$11,001,279,868	RCN LESS PHYSICAL	
VALDEZ TERMINAL OFFICE	-\$3,500,000	-\$11,867,250	VALDEZ TERMINAL OFFICE	
RCN LESS TERMINAL	\$11,156,192,521	\$10,989,412,618	RCN LESS TERMINAL	
FUNCTIONAL OBS (SR)	-\$367,384,329	-\$1,407,536,759	FUNCTIONAL OBS (U&S)	USED DOR METHOD
LESS SR	\$10,788,808,192	-\$123,999,861	FUNCTIONAL OBS (SR)	USED DOR METHOD
FUNCTIONAL OBS (U&S)	-\$981,781,545	-\$1,531,536,620	TOTAL FUNCTIONAL	
RCN LESS PHY & FUNCT (2)	\$9,807,026,647	\$9,457,875,998	LESS FUNCTIONAL	
PLUS R.O.W.	\$170,907,600	\$180,793,400	PLUS ROW	
TOTAL RCNLD	<u>\$9,977,934,247</u>	<u>\$9,638,669,398</u>	TOTAL RCNLD	

### **IV. Board's 2010 Adjustments**

The Board was persuaded by its review of the court decision and by the Municipalities that only two adjustments to the Division's 2010 assessment should be made. The Board's adjustments to the Division's economic end life and ad valorem tax costs, as well as the Board's decision not to adjust the Division's scaling factor calculations, are discussed below.

#### **A. TAPS Economic End Life**

Since the first TAPS assessment appeal before the Board in 2001, there have been two components to the projection of the estimates of the economic end life of the TAPS that the Division has presented to the Board. 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. From 2001 to 2009, these estimates were prepared for the Division by Alaska oil production forecast expert Dudley Platt. The second component of the end life calculation is an estimate of the minimum daily throughput that can be maintained by the TAPS. At the point where these two estimates show that the oil fields that the TAPS serves can no longer provide enough oil to

maintain the minimum daily throughput for the TAPS, it is assumed that TAPS' economic life will end.

In 2001, when the Board first approved the Division's methodology for estimating the TAPS' economic end life, the Division used its own future throughput projections, which it had developed for revenue planning purposes. The Board upheld the use of these projections, which were challenged by the owners of the TAPS, concluding that these projections were carefully prepared based on the best information available to the Division. The Division continued to use these throughput projections without any adjustments until 2007.

In 2006, the Division first determined that the TAPS would be able to maintain a minimum mechanical throughput of 200,000 barrels per day. In earlier assessments of the TAPS, the Division had used 2034 as the TAPS' economic end life based on a minimum mechanical throughput of 300,000 barrels per day. In 2006, the Board concluded that the Division properly adjusted its valuation to reflect its current best estimate of the TAPS' economic life as running to 2042.

In 2007, the Division determined that it should change its methodology for calculating throughput for estimating the TAPS' economic end life by correcting for a historic trend of slight short-term overestimates of future TAPS throughput in its projections. 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 the future throughput estimates, the economic end life of the TAPS remained at 2042 for the 2007 assessment.

In 2008, the Division decided to stop adjusting its future throughput estimates for the purpose of calculating the TAPS' end life. 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 Board found that putting the "under evaluation" oil back into the

projections was not a proper change in methodology because the Division did not provide a reasonable explanation for its decision to make this change.

In 2009, the Board agreed with the Division's decision, consistent with the Board's ruling in 2008, not to include oil that would come from projects "under evaluation" in its future throughput projections when it calculated the economic end life. 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 in 2009, the Board concluded that excluding reserves that are "under evaluation" for development was a reasonable way to base the TAPS value on proven reserves that were technically, economically and legally deliverable as of the assessment date. In 2009, the Owners did not dispute the Division's determination that 2042 was the best estimate of the TAPS' economic end life.

In 2010, the Owners argued that the TAPS' minimum mechanical throughput was 300,000 barrels per day. The Owners provided testimony from Patrick G. McDevitt, an employee of Alyeska who had been studying low flow problems. The Municipalities maintained that the TAPS could continue to operate at 100,000 barrels per day. The Municipalities provided testimony from pipeline flow model expert Dr. Jerry L. Modisette.

Even though in 2009 the Division had determined that the TAPS' minimum mechanical throughput was 200,000 barrels per day, in 2010 the Division admitted that, although its end life estimate remained at 2042, the Division's recent throughput projections indicated that TAPS throughput would be only 142,000 barrels per day in 2042. The Division defended this inconsistency by arguing that there was no persuasive evidence that TAPS could not operate with 142,000 barrels per day of throughput.

In making the determination that as of January 1, 2010, the best estimate of the economic end life of the TAPS was 2042, the Board was concerned that the Division gave inappropriate



weight to the consideration that this was the end life used for the 2009 assessment. Focusing too closely on the question “what has changed?” and his answer “not much has changed to suggest that 2042 is no longer a reasonable end-of-life to TAPS,” the Division’s assessor failed to provide an adequate justification for abandoning the methodology used in the past to determine that component of the assessed valuation.<sup>7</sup>

It appeared to the Board that the Division was placed in an awkward situation in 2010 by the fact that its latest throughput projections, prepared by its new production forecaster, Mr. Frank Molli, would have resulted in an end-life significantly closer if the Division had applied those new throughput estimates to the minimum mechanical throughput estimate used in the 2009 assessment. Uncomfortable with that result due to other evidence, cited in the revenue decision, which indicated that the economic end life will be later than 2042, the Division’s assessor chose to rely on last year’s number and abandon the methodology used to arrive at that number without a reasonable explanation, and without articulating a coherent methodology for determining the TAPS’ economic end life for future assessments.

The Board recognized that the assessor has wide discretion in choosing among different reasonable methodologies to determine a component of his valuation calculation. The Board also recognized that it is the assessor’s responsibility to choose between conflicting data in applying that chosen methodology. The Board’s statutory task is not to substitute its judgment for the assessor’s when these choices are reasonable. The Division could have chosen a different methodology for determining this component of the valuation. It would also have been within the Division’s authority to use its old methodology and the throughput projections used last year, if the Division had explained why last year’s throughput projections were more reliable for use in this calculation than its newer calculations. Instead of applying a methodology to determine end life, it appears that evidence that broadly indicated that the economic end life will be later than 2042 was used to justify not changing that number.

Having determined that this approach was improper, the Board applied its own expertise to

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<sup>7</sup> See Revenue Decision 10-56-12 at pages 15-23.

choose a methodology and data to determine end life for the purpose of the 2010 assessment based on the evidence and arguments presented at the hearing. The Board chose to use the methodology the Division had used in the past and that apparently formed the basis for the Court's finding on the TAPS' economic end life for the 2006 assessment: that is, to begin by determining the best estimate of the minimum mechanical throughput of the TAPS as it was configured at the assessment date, without having to substantially rebuild the TAPS in order to deal with low flow rate issues. Once the best estimate of minimum mechanical throughput has been developed, the date at which throughput will fall below this level is determined by using the most reliable future throughput projections available. The estimated economic end life is the point in time when the projected throughput falls below minimum mechanical throughput.

As noted above, this methodology effectively limits the economic life for tax purpose to the life of the proven reserves in the fields that are or will be served by the TAPS by taking into account only the oil that is included in the best estimates of future throughput used for financial planning such as revenue planning and bonding, and avoids inclusion of speculative sources of future production.

The Board found Mr. Platt's production forecasts, provided by the Municipalities, to be the most up-to-date and reliable throughput projections for estimating the TAPS' end life for the 2010 assessment. Mr. Platt prepared these projections for the North Slope Borough. The North Slope Borough was concerned that the Division's decision to change its oil production forecaster, as well as the unexplained changes in the production forecast produced by Mr. Molli, might unsettle the bond market and put the Borough's bond ratings at risk. The Board gave additional weight to Mr. Platt's projections because they were not specifically prepared for the AS 43.56 TAPS appeal.

The Board has always given great weight to Mr. Platt's forecasts in the past. Mr. Platt's testimony was further support for the Board's conclusion that his forecast provided the best estimate available of the TAPS' future throughput. The Board lacked similar confidence in the forecasts made for the Division by Mr. Molli. The Board also found Mr. Molli's forecasts to be more difficult to understand and less useful for the purpose of estimating end life, because the

Board could not find his production forecasts for individual fields. If the Division decides to use Mr. Molli for future forecasts, the Board would encourage production of Mr. Molli as a witness so that he can be cross-examined, and can help the Board understand his work.

With the limited information available, the Board was unable to make a definitive determination of the correct minimum mechanical flow limit for 2010, but the Board found that 200,000 barrels per day is the best estimate. There is some evidence that the ability to pump at 200,000 barrels per day was part of the design standard for strategic reconfiguration.

As the Board previously stated in both 2008 and 2009, it will likely be proper to extend the estimated economic end life of the TAPS 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. The Board suggests that the Division consider having an independent study done specifically for the purpose of estimating TAPS' economic end-life for AS 46.56 taxation purposes. The Board is concerned that the production forecasts that have been done for revenue projections may focus more attention on being accurate in the short-term than on predicting ANS production after 2040.

The Board agreed with the Court that reserves from the third category included in Mr. Platt's throughput projections should be used in the end life estimate. However, the Board did not find that the evidence presented for the 2010 assessment showed that all of the reserves in that category met the requirements for "proven reserves" as that term is used in AS 43.56.060(e)(2) and 15 AAC 56.110(c), and by the Court in interpreting the jurisdictional limitation embodied in regulation. At the hearing, the only reserves in the "under evaluation" category that were shown to be technically, economically and legally deliverable as of the assessment date were the Point Thomson reserves. The Alaska Oil and Gas Conservation Commission has characterized these reserves as proven but not producing. The reserves of the other fields in the under consideration category were not shown to have met this standard.

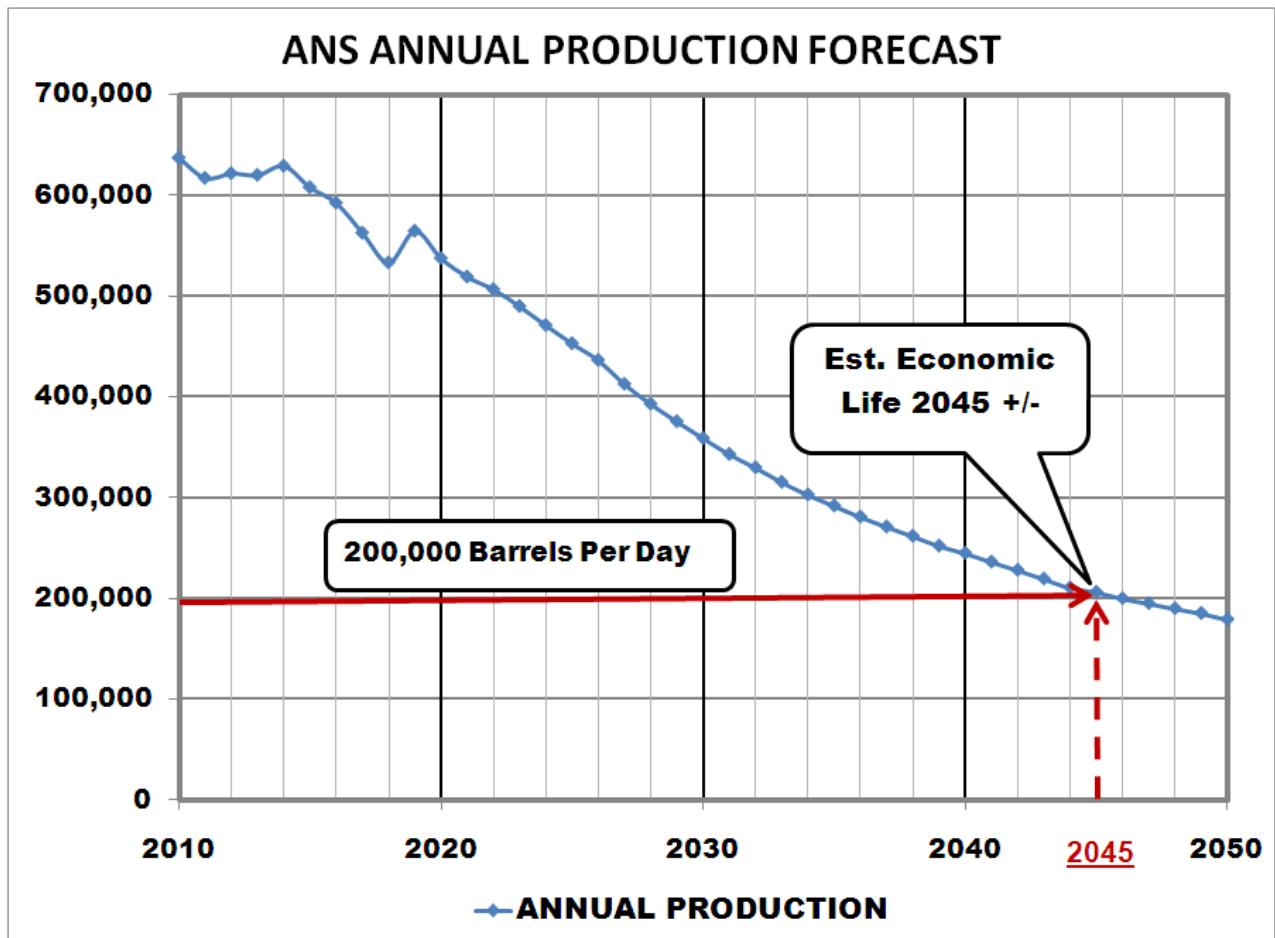
The chart below shows how the Board adjusted Mr. Platt's production forecasts to exclude oil from fields in the under consideration category, other than oil from Point Thomson, to estimate

the ANS production and TAPS throughput decline curve:

<b>SARB - TABLE 2</b>						
<b>Source: DOR I-7 PAGE 3-3</b>						
<b>PROD</b>	<b>EST.</b>	<b>WEST SAK</b>	<b>TABASCO</b>	<b>NPR-A</b>	<b>ADJ</b>	<b>ORIGINAL</b>
<b>YEAR</b>	<b>BBLs/DAY</b>	<b>FIELD</b>	<b>FIELD</b>	<b>FIELD</b>	<b>BBLs/DAY</b>	<b>BBLs/DAY</b>
2010	654,823	16,000	2,000	0	636,823	654,823
2011	633,795	15,000	2,000	0	616,795	633,795
2012	637,318	14,000	2,000	0	621,318	637,318
2013	636,700	13,000	2,000	2,000	619,700	636,700
2014	651,806	12,000	1,000	10,000	628,806	651,806
2015	634,503	11,000	1,000	15,000	607,503	634,503
2016	616,090	10,000	1,000	13,000	592,090	616,090
2017	598,337	14,000	1,000	21,000	562,337	598,337
2018	574,841	22,000	1,000	19,000	532,841	574,841
2019	622,175	31,000	1,000	26,000	564,175	622,175
2020	598,178	37,000	1,000	23,000	537,178	598,178
2021	582,779	42,000	1,000	21,000	518,779	582,779
2022	572,347	46,000	1,000	19,000	506,347	572,347
2023	557,493	50,000	1,000	17,000	489,493	557,493
2024	538,651	52,000	1,000	15,000	470,651	538,651
2025	520,583	55,000	0	13,000	452,583	520,583
2026	499,034	51,000	0	12,000	436,034	499,034
2027	471,346	48,000	0	11,000	412,346	471,346
2028	446,629	44,000	0	10,000	392,629	446,629
2029	425,170	41,000	0	9,000	375,170	425,170
2030	404,607	38,000	0	8,000	358,607	404,607
2031	385,709	36,000	0	7,000	342,709	385,709
2032	368,425	33,000	0	6,000	329,425	368,425
2033	351,992	31,000	0	6,000	314,992	351,992
2034	335,432	29,000	0	4,000	302,432	335,432
2035	321,513	26,000	0	4,000	291,513	321,513
2036	308,563	25,000	0	3,000	280,563	308,563
2037	296,707	23,000	0	3,000	270,707	296,707
2038	285,405	21,000	0	3,000	261,405	285,405
2039	274,761	20,000	0	3,000	251,761	274,761
2040	264,435	18,000	0	2,000	244,435	264,435
2041	254,839	17,000	0	2,000	235,839	254,839
2042	245,641	16,000	0	2,000	227,641	245,641
2043	236,055	15,000	0	2,000	219,055	236,055
2044	226,120	14,000	0	2,000	210,120	226,120
<b>2045</b>	<b>219,898</b>	<b>13,000</b>	<b>0</b>	<b>1,000</b>	<b>205,898</b>	<b>219,898</b>
2046	212,519	12,000	0	1,000	199,519	212,519
2047	205,592	11,000	0	0	194,592	205,592
2048	199,559	10,000	0	0	189,559	199,559
2049	193,845	9,000	0	0	184,845	193,845
2050	187,638	9,000	0	0	178,638	187,638

Although the court found that the economic end life of the TAPS was 2047 for the 2006 assessment, applying the same analysis to the evidence provided for the 2010 assessment appeal, the Board found that the economic end life for TAPS was 2045. The two-year difference between the Board and the Court's end life estimates is due to the Board's finding that the evidence showed that the oil from Point Thomson in the under consideration category was economically recoverable with current technology. The extension of the TAPS economic end life between the 2009 and 2010 assessments from 2042 to 2045 is, however, consistent with Board's prediction that the end life would move further out into the future as additional reserves become proven in the sense of there being more certainty about the economic and technical deliverability of those reserves. The graph below shows the Board's economic end life estimation at 2045 using its adjustments to Mr. Platt's throughput forecast.

**SARB TABLE 3**



When the Board moved the end life out from the Division’s estimate of 2042 to 2045, the physical depreciation of the TAPS decreased, as is illustrated by the this comparison of the Board and the Division’s depreciation calculations:

**SARB TABLE 4**

<b><u>Physical Depreciation</u></b>		
	<b><u>DOR</u></b>	<b><u>SARB</u></b>
Construction Completion (Actual)	1977.5	<b>1977.5</b>
Current Assessment Year	2010	<b>2010</b>
Weighted Average Age	1978.5	<b>1978.5</b>
End-of-Life	2042	<b>2045</b>
Effective Weighted Average Age	31.50	<b>31.50</b>
Remaining Economic Life	33.00	<b>36.00</b>
Total Economic Life	64.5	<b>67.5</b>
% Depreciated (Age/Life)	48.84%	<b>46.67%</b>

This decrease in the depreciation of the TAPS resulted in less of a reduction of the RCN and, therefore, increased the Board’s value of the TAPS for the 2010 assessment relative to the Division’s.

**B. Cost of Ad Valorem Taxes during Construction**

During construction a pipeline is taxed based on its actual cost with some adjustments, rather than on the pipeline’s economic value. Under Alaska Regulation 15 AAC 110(b)(1), costs attributable to the period of construction of the pipeline project are not taxable when they are incurred; instead, these costs are not taxed until they accrue over the period of construction, based on a formula which prorates the costs accrued in a given year over the estimated months remaining to complete the pipeline project from the date the cost is incurred. These costs include construction machinery and equipment, construction camps, and unallocated costs which relate to the overall construction (such as overhead, administrative, engineering, design, research and

development costs). As a result of this regulation, only a fraction of these construction costs are included in the value that is taxed for the year in which they are incurred.

Alaska Regulation 15 AAC 110(b)(1) provides the following example to describe how this ad valorem tax reduction works:

A pipeline transportation company anticipates that the construction phase of its project will commence during January, 1975, and will terminate in December, 1976. (A 24-month construction period.) During 1974 the company acquires construction equipment, construction camps, and related facilities for a cost of \$20,000; during 1975, \$200,000; and during 1976, \$100,000. For the purpose of accrual of these costs it is assumed that they were expended at midyear. This accounts for a six-month depreciation factor on the first year's investment and a 30-month depreciation period for the costs incurred in the first year. Subsequent investment periods are treated in the same manner with annual adjustments made for the months remaining during the construction period.

The costs accrued with respect to the pipeline project for each assessment date during the construction period will be calculated as follows:

<u>Date</u>	<u>Factor</u>		<u>Cost</u>		<u>Value</u>
1-1-75	6/30	x	20,000	=	4,000
1-1-76	18/30	x	20,000	=	12,000
	6/18	x	200,000	=	66,667
					78,667
1-1-76	30/30	x	20,000	=	20,000
	18/18	x	200,000	=	200,000
	6/6	x	100,000	=	100,000
					320,000

Other construction costs, construction costs that will outlast the construction period, are included in the pipeline's value and taxed as they are incurred. These are costs such as permanent camps, pump stations, permanent storage facilities, roads, permanent airstrips, terminal facilities, tank farms, docks, labor, materials, supplies, machinery, equipment, pipe, easements, rights-of-way, improvements, and structures. These costs are described in 15 AAC 110(b).

As a result of the way these different costs are treated for ad valorem tax purposes while a pipeline is under construction, it is more accurate to estimate the cost of ad valorem taxes that



should be included in the RCN of an Alaska pipeline by separating these two types of construction costs and determining when and to what extent these different types of construction costs will be included in the value that is subject to ad valorem taxation for each tax year during the construction period.

The Division had not considered the issue of how these different costs are taxed in previous assessments. The Division did not have a breakdown of these two types of construction costs for the TAPS with an estimate of when the costs would be incurred or accrued when it started the 2010 assessment process. The Division simply treated all these costs as accruable, as it had for previous assessments, which resulted in a significant under-estimate of the cost of ad valorem taxes that would be paid during the construction of a replacement TAPS.

The Division did not dispute that the methodology the Municipalities used to calculate the cost of ad valorem taxes during construction of a replacement for the TAPS was correct or that the Municipalities' calculations were correct. The Division argued that this information should not be considered for this year's assessment because the Municipalities did not provide the information in time for the Division to review it properly before the revenue decision needed to be issued.

The Board disagrees. Unlike situations where there is not adequate information to determine whether or not the Division's calculations of a component of the assessed calculation are correct, in this case the Municipalities have shown that the Division's methodology for calculating these costs was not correct and has provided the figure that should be used.<sup>8</sup>

Using the Municipalities' methodology for calculating the cost of ad valorem taxes during construction added additional costs to the RCN and therefore further increased the Board's value of the TAPS for the 2010 assessment relative to the Division's.

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<sup>8</sup> See Appendix 1 of the Municipalities 2010 Pre Hearing Brief to the Board, *Memorandum re: AVTDC Calculation*, dated April 18, 2010.

### C. Scaling

The Board did not find that the Division's scaling adjustments to the pipeline were improper, but because the Division took a slightly different approach to scaling in 2010 than the Court did in its decision on the 2006 assessment, the Board decided to discuss its reasoning for upholding the this aspect of the Division's assessment in detail.

The Division accounted for the super-adequacy in the TAPS that is reflected in the difference between the average 2009 throughput and the legally required capacity of 1.1 million barrels per day, which the TAPS is also currently configured for, by scaling. The Division characterized this super-adequacy as functional obsolescence. The Court characterized this super-adequacy for the 2006 assessment as economic obsolescence. Whether one views this super-adequacy as economic obsolescence or functional obsolescence depends whether one views the problem as the pipeline having too wide a diameter or as not enough oil going through it.

Economic obsolescence is a problem caused by factors that are external to a property that reduce its value, such as a downturn in the rental market that leaves an apartment building half occupied. Functional obsolescence is a problem within the property itself that gives it super-adequacy and decreases it value, such as buildings that are too big or lavish within a certain area. The Board agrees with the Division that it is more helpful to view the current under-utilization of the TAPS as functional obsolescence because, like an old apartment building with high ceilings that has recently been remodeled, the excess diameter of the pipe is the part of the property that has not recently been reconfigured to meet its owners' current needs.

Unlike the Court's scaling calculation for the 2006 assessment, the Division applied the scaling only to the pipe. This is because, since 2006, strategic reconfiguration is assumed to have removed this type of obsolescence from most of the other TAPS components, including the pumps, allowing throughput to be varied from 1.1 million to 200,000 barrels per day.<sup>9</sup> Since these other

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<sup>9</sup> See, for example, Division's Exhibit 2010 j-3.

components have recently been rebuilt to conform to the Owners' current needs, the Board concluded that a scaling factor for obsolescence should not be applied to them for the 2010 assessment.

The Board rejected the under-utilization ratio offered by the Municipalities as an alternative to the ratio that the Division and the Court both used to determine the under-utilization of the TAPS. Rather than using the average daily throughput divided by the legally required capacity of 1.1 million barrels per day, the Municipalities argued the under-utilization ratio should be obtained by dividing the highest throughput for any day within the last year by the legally required capacity of 1.1 million barrels per day. The Municipalities' argument was that if the capacity is actually being used, even if only once a year, it is not a super-adequacy. The Municipalities maintained that if scaling is to be applied, the under-utilization ratio should be maximum-use over maximum-capacity, not average-use over maximum-capacity.

The Board found that the evidence did not show that it was unreasonable for the Division and the Court to use the average daily throughput to determine the ratio of capacity to current use. The Board found the evidence did not show that the legally required throughput capacity of 1.1 million barrels per day was the absolute current maximum throughput capacity of the TAPS, rather than something closer to the average maximum daily throughput capacity that must be maintained. Requiring that the Owners' maintain a maximum throughput capacity of 1.1 million barrels per day implies that the TAPS could run with at least that capacity for more than one day, and could probably handle any short throughput spikes over 1.1 million barrels per day which would be expected when running at that capacity.

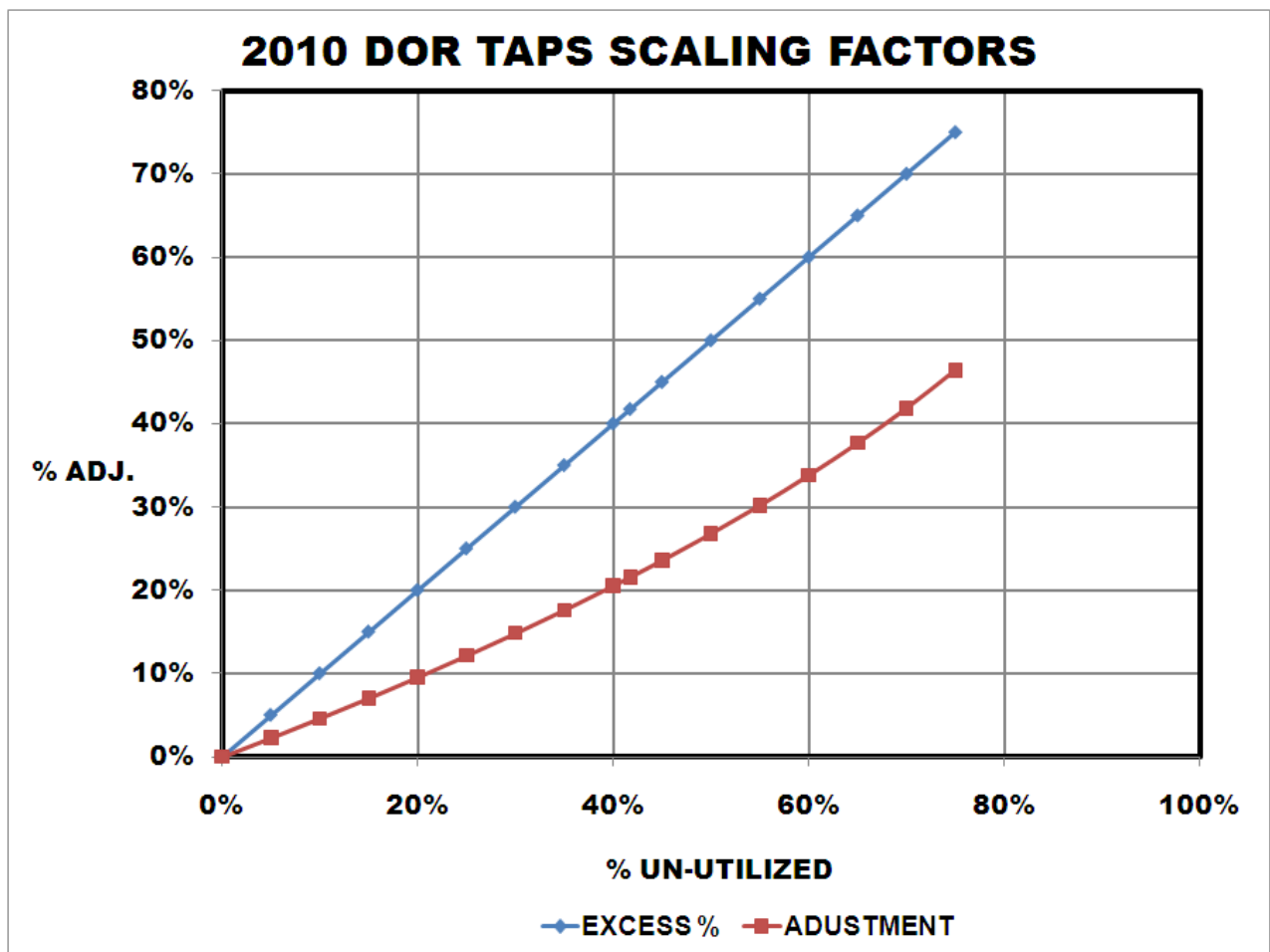
The Municipalities also argued that no reduction in the 2010 assessed value of the TAPS for super-adequacy was proper because age life depreciation adequately took any obsolescence into account and because the Owners are required to maintain this capacity.

The Board found that the Municipalities failed to show that the Division should not have accounted for super-adequacy in the TAPS through scaling the pipeline. The Board found that the

Division was correct in its determination that the pipeline’s value is reduced because it is designed to have greater throughput capacity than the Owners’ current needs.

The adjustment that the Division and the Court used to account for this obsolescence does not result in assigning no value to this super-adequacy. Both the Court and the Division applied the .45 scaling factor to the under-utilization ratio obtained by dividing the TAPS throughput by its capacity. This means that even though by the Division’s estimate the TAPS has 42% excess capacity, the Division only adjusted the value of the TAPS by 21.6%. The Board created the graph below to illustrate how the .45 scaling factor reduces the adjustment of value for under-utilization, recognizing and quantifying the value attributable to excess capacity.

**SARB TABLE 5**



The table following shows the numerical data points on the graph above:

**SARB TABLE 6**

<b>UTILIZATION %</b>	<b>EXCESS %</b>	<b>ADJUSTMENT</b>	<b>DIFF</b>
25%	75%	46.4%	29%
30%	70%	41.8%	28%
35%	65%	37.7%	27%
40%	60%	33.8%	26%
45%	55%	30.2%	25%
50%	50%	26.8%	23%
55%	45%	23.6%	21%
58%	42%	21.6%	20%
60%	40%	20.5%	19%
65%	35%	17.6%	17%
70%	30%	14.8%	15%
75%	25%	12.1%	13%
80%	20%	9.6%	10%
85%	15%	7.1%	8%
90%	10%	4.6%	5%
95%	5%	2.3%	3%
100%	0%	0.0%	0%

**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 2010 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 2010 assessed value of the TAPS. The Board also concluded that there was no further adjustment needed to bring the 2010 assessment into conformity with the Superior Court's decision.

The Court's valuation of the TAPS as of the 2006 assessment date is close to both the Division's and the Board's valuations for 2010, because as noted above, the Court was able take advantage of updated information that the Division and the Board has already incorporated into more recent assessments, including the 2009 assessment. The new evidence obtained through the discovery process before the Court to a great extent confirmed what the Division, the Municipalities and the Board had determined since 2006 regarding the weakness in the arguments and the evidence provided by the Owners in support of a lower valuation. The de novo review allowed the court to cure shortcomings of the 2006 assessment process that resulted from the time constraints and the limited access to information that the AS 43.56 assessment process imposed on the parties and the Board.

The Board agreed with the Court's reasoning in finding it was appropriate not to give any weight to the comparable sales and tariff income approach valuations provided by the Owners in determining the value of the TAPS. At the hearing, the Owners again raised these alternative approaches to valuation as well as several other issues that the Board had rejected in previous TAPS assessment appeals and the Court rejected in the 2006 appeal. These arguments include the Owners' objections to inclusion of the costs of capitalized interest and ad valorem taxes in the RCN, and constitutional challenges to the Division's reliance on the cost approach. The Owners failed to persuade the Board that any adjustments should be made to the Division's valuation.

In regard to the income approach, the Board found the Court's analysis particularly persuasive when describing the contrast between a tariff income and a market derived income. The tariff income is not based on the property's market value. It is based on costs and a reasonable return on those costs. This distinction is more important in a property like the TAPS because most of its costs have almost already been recovered through the tariffs that have been collected over the past thirty years that constituted the TAPS' original estimated economic life expectancy. The TAPS is now expected to last more than another thirty years. The Board again found that it was reasonable for Division not to adjust the assessed valuation based on the tariff income valuations of the TAPS or income shortfall adjustments based on the assumption that the tariff income has a significant relationship to the TAPS' value.

The Board again found that the Division's reliance on Pro Plus was reasonable. The Board determined that it would not have been proper to base the assessed valuation on the Stantec cost study of a hypothetical pipeline at 30 inches. The Board found that this redesign of the assessed property would have mechanical characteristics and a route that would be too different from the existing pipeline and its capabilities to provide a useful estimate of the 2010 value of the TAPS.

In addition to the problems associated with attempting to quantify the value of the differences between the pipeline costed in the Stantec study and the TAPS, the Board was very concerned about several problems with the Stantec study that cast doubt on the reliability of the Stantec cost estimation for its 30-inch pipeline. These issues of concern included the use of gravel with no cost assigned; the lack adequate costs for contingency; inadequate land and ROW costs; the extensive use of single support VSMs in seismically sensitive areas of the pipeline corridor; and inadequate proposed ROW width for access for maintenance and emergency response.

Some of the Owners' witnesses' responses to the other parties' criticism of these shortcomings in the Stantec study caused the Board to question whether the Stantec study was put together and offered in good faith. For example, the Board found particularly disconcerting the apparent suggestion that those involved in the study did not believe there was a need for contingency costs to be built in to the RCN because if there were unexpected increases in costs the contractors would just adjust their contracts for "change of scope."

The Board did not find that the pipeline designed in the Stantec cost study had equal utility to the TAPS on the assessment date. The pipeline used at for the Stantec study would simply not perform similarly to the TAPS at the TAPS' legally required maximum required throughput capacity. There is some question as to whether the Stantec 30-inch pipeline would be able to handle that capacity. It would certainly not be able to handle that capacity without significantly increased operating costs.

The TAPS is currently the only economically feasible way to transport oil from Alaska North Slope Reserves to market. It would not be proper to ignore the value of the potential future use of the TAPS by failing to include the value of its flexibility to increase throughput capacity to

transport existing petroleum reserves that are potentially recoverable. The Stantec pipeline simply does not provide the same flexibility as the TAPS. The differences in the potential costs associated with this lack of congruity between the assessed property, the TAPS, and the property designed for the Owners' cost study would be difficult to quantify.

The Municipalities asked the Board to focus its review of the Division's 2010 assessed valuation on three areas where the Division did not adopt the Municipalities' recommendations. These three areas were: (1) calculation of the cost of ad valorem taxes; (2) the TAPS' economic end life; and (3) scaling. As noted above, the Municipalities met their burden of proof to show that the Division's treatment of the first two of these three issues was improper. For the reasons discussed above, the Board disagreed with the Municipalities' position on scaling.

#### **VI. Access to Information in the AS 46.56 Assessment Process**

The Division filed and later withdrew a pre hearing memorandum in this appeal, which addressed discovery and confidentiality issues. The Board believes that it is time for the Division to address the problems created by the way it handles taxpayer confidential information in the assessment process. The Division's failure to provide interested parties with the information on which the assessment was made in time to allow those parties meaningful input in the determination of the property's assessed value, before that determination is subject to limited review of an appeal before the Board, has the potential to throw the fundamental fairness of the AS 43.56 assessment process into question. The Board believes that, due to the Division's current practices with regard to the use of taxpayer confidential information in its AS 43.56 assessments, that process is close to broken and is headed in the wrong direction.

Limiting interested parties' access to the information used in the assessment and informal conference process encourages municipalities and taxpayers to file appeals to the Board simply to obtain access to the information on which the valuation was based. While the Court, in its trial de novo for the 2006 assessment, was able to cure many of the fairness issues created by the Municipalities' limited access to information, the consequence of failing to address the issues that



led to the Division's failure to obtain and share information earlier in the process may be that more AS 43.56 appeals will be litigated in court.

The Board recognizes that use of taxpayer confidential information creates criminal and civil liability issues for the Division and other parties, and is concerned that the use of taxpayer confidential information in hearings before the Board will create personal civil and criminal liability for Board members and further limit public access to important information about the AS 43.56 assessment process. The use of taxpayer confidential information in a hearing before the Board would limit public access to all or part of the Board's hearings and the information that forms the basis of its Certificates of Determination.

The failure to timely share information that is used by the assessor in valuing AS 43.56 property with interested parties such as the owner taxpayer and the municipality where property is located, may create due process issues. If taxpayer confidential information that was used in the original assessment or in the informal conference process is first presented to an interested party during an appeal before the Board that information potentially comes too late in the process to allow the interested parties to have a fair opportunity to challenge the reliability or applicability of the information relied on by the assessor due to the limited scope of the Board's review of the Division's revenue decision.

Furthermore, if taxpayer confidential information that was used in the original assessment or in the informal conference process is first presented to an interested party during an appeal before the Board, that information may be shared too late in the process due to time constraints imposed on the adjudicatory process for appeals before the Board. More parties will be encouraged to appeal the Board's decision if they are not given a fair opportunity to present their case before the Board.

The Board is concerned that waiting until an appeal is before the Board to deal with the issues raised by the use of taxpayer confidential information in an assessment will create delays in the Board's hearing process and prevent the Board from meeting the tight time frames imposed on its decision-making.

There are also several other problems that Board anticipates will arise if the Division waits until an appeal is before the Board to deal with its use of, and its inability to share, taxpayer confidential information used in the assessment. The Board lacks the explicit statutory or regulatory authority to issue protective orders, in stark contrast to the explicit authority given to other adjudicatory bodies hearing Alaska administrative tax appeals. The Board has explicit authority to subpoena witnesses, which implies that the Board is not authorized to issue other types of orders to compel the production of evidence that are not explicitly authorized, such as subpoenas for the production of documents or discovery orders. Motion practice and litigation of requests for discovery and protective orders may delay the Board's proceedings.

Given these issues and the time constraints imposed on the Board's hearing process, the statutory and regulatory scheme for AS43.56 assessments and appeals indicates that the Board's authority to cure a failure by the Division to timely provide the basis for its decision is limited to making a finding of improper assessment.

For these reasons, the Board requests that the Division seek to limit the use of taxpayer confidential information in the AS 43.56 assessment process to the greatest extent possible. The Board also requests that the Division consider initiating a regulations project to make more information public at an earlier stage in the process, and to give the Division authority to issue protective orders itself as early in the process as possible, when they are needed. The Division may also wish to seek the authority to require a waiver of confidentiality as a condition of a document being considered by the assessor when the taxable property is located within a municipality, which as an interested party has the right to challenge the information used in the assessment.

Another approach the Division may wish to consider is to seek a change in the law making any documents submitted to the assessor by an interested party in support of a position on the value of a property public records, as are the tax decision, tax records and proceedings from a tax appeal under AS 43.05.470(a). A taxpayer seeking to avoid disclosure could be required to quickly file a request to either the Division or an administrative tribunal for a protective order. Granting such an order could be made subject to a showing of good cause, as are protective orders

for tax records under AS 43.05.470(b). Further, all of the records could be made public records once an assessment or a revenue decision is appealed, absent a timely filed request for a protective order and a showing of good cause.

The Division has the statutory authority to disclose taxpayer confidential information in the adjudicatory process. The Board encourages the Division to set out how these disclosures are to take place in regulations in a way that protects the legitimate interests of a taxpayer who has good cause to protect specific information, protects the integrity of the assessment and adjudicatory process, and protects the right of the interested parties in an assessment in dispute to be timely provided with the information upon which that assessment was based. The Board is willing to participate with other stakeholders in such a rulemaking process. The Board will, however, continue to advocate that its hearings remain open to the public, that the documents presented in its proceedings continue to be open to public inspection, and that its determinations are based, to the greatest extent possible, on information which the public may access.

## **VII. Conclusion**

The Board has concluded the Division used the most reliable cost study available for its estimate of the TAPS Replacement Cost New as of January 1, 2010. The Division made a careful, open, and thorough review of this study. The Division 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 2010 estimate of the TAPS value.

However, based on the evidence presented, the Board has concluded that the Division failed to use a proper methodology for determining the economic end life and used the wrong methodology to calculate the cost of ad valorem taxes during construction. The Board has 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 has concluded that the Division's 2010 assessed valuation of the TAPS, set at \$9.20346143 billion, should therefore be adjusted. The resulting value, \$9,638,669,398, is now set as the 2010

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.

Judicial review of this decision may be obtained by filing an appeal in the Alaska Superior Court in accordance with Alaska Rule of Appellate Procedure 602(a)(2) within 30 days after the date of this decision.

DATED this 10<sup>th</sup> day of June, 2010

*Signed*  
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Don Martin McGee, Chair  
State Assessment Review Board

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