

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

In the Matter of:)	
)	Appeal of Revenue Decision
THE TRANS-ALASKA PIPELINE SYSTEM)	No. 11-56-09
)	
Oil & Gas Property Tax (AS 43.56))	OAH No. 11-0153-TAX
<u>2011 Assessment Year</u>)	

CERTIFICATE OF DETERMINATION

The State Assessment Review Board (Board) convened from May 16, 2011, through May 20, 2011, to hear and deliberate on the AS 43.56 appeals of the 2011 assessment of the Trans-Alaska Pipeline System (the TAPS). Chair Don Martin McGee and members Mary E. Keller, Michael B. Salazar, James I. Mosley 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.¹

The TAPS owners, ConocoPhillips Transportation Alaska, Inc., Exxon/Mobil Pipeline Company, Koch Alaska Pipeline Company, BP Pipelines (Alaska) Inc., and Unocal Pipeline Company (the Owners) were represented by attorney James M. Seedorf for ConocoPhillips Transportation Alaska, and attorneys F. Steven Mahoney, Michael R. Garatoni and Nicholas Bajwa for all the TAPS owners. Assistant Attorneys General Kenneth J. Diemer and Martin T. Schultz, and attorney Robert M. Johnson represented the Alaska Department of Revenue Tax Division (the Division). The municipalities appealing the Division's 2011 TAPS assessment (the Municipalities) were represented by attorneys Robin O. Brena and Laura Gould for the Fairbanks North Star Borough, William M. Walker and Sara Rishko for the City of Valdez, and Mauri Long and Jessica Dillon for the North Slope Borough.

¹ 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.

I. Introduction

The subject of this appeal is the Division's Revenue Decision number 11-56-09, which set a \$7.9329798 billion assessed valuation for the TAPS as of January 1, 2011. The Division used the cost approach to arrive at its assessed valuation. The Owners argued that the 2011 TAPS value was no more than \$1.25 billion. The Municipalities argued the TAPS assessed valuation should be at least \$11.0 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 one exception the \$7.9329798 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's valuation was improper because the Division, without adequate evidence or reasoning, failed to give the findings and conclusions in Superior Court's decision on the 2006 TAPS appeal proper weight in making its economic end-life calculation for the 2011 assessment. The Division's assumptions for both the minimum throughput and projected throughput components of that calculation were inconsistent with the court's findings. After correcting these items and the resulting end-life estimate, the Board has determined that the 2011 assessed valuation of the TAPS should be adjusted to \$8,671,720,679.²

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

² See Graphic showing the Board's 2011 adjustments at page 20.

the TAPS was completed in 1977. Upon completion the predicted economic life of the TAPS was approximately thirty years. However, thirty-three years later, in 2010, the expected economic life of the TAPS was predicted by the Alaska Superior Court still to be at least thirty-seven 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 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. 11-56-09.

D. Consolidation and Coordination of Appeals

For the appeal before the Board of the Division's 2011 assessment of the TAPS, the Owners' and the Municipalities' appeals of Revenue Decision No. 11-56-09 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 2010 TAPS Assessed Value

³ See Pre-Hearing Order issued April 29, 2011.

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 appraisers relied most heavily on projected TAPS tariff income data in setting their valuation estimates. The then owners (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 2001 dollars.

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 the 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.⁴

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.⁵

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 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 (ANS) oil. This amount was far below the amount previously charged under the TAPS Tariff Settlement Agreement, which still

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

⁵ 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.

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 already 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 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 to

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	
		264,618,145.75	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

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

RECAP

Program Fees	\$ 249,875,492	added		
	\$ 8,291,935,550		1.059	\$ 8,781,159,747
			-0.4419	\$ (3,880,394,492)
				\$ (367,384,329)
				\$ 4,533,380,926
				RCNLD
Escalator= 1.0590				\$ 232,109,103
Through-Put Adj. = .0512			0.0512	\$ 4,301,271,823
				RCNLD(w/Thruput Adj)
				\$ 5,000,000
				\$ 4,306,271,823
				2006 SARB Value
				\$ 4,306,271,800
				Rounded

F. 2007 TAPS Assessment

In 2007, the Division again decided that it should look to the final assessed valuation of the previous year based on the Mustang cost study 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.

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.

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 cost study was too old to use to extrapolate the TAPS 2008 RCN. 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 cost 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 Board found that in 2008, the Division had extended the economic end-life of the TAPS from 2042 to 2045 without a rational justification. 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	
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	5%
Direct Costs plus X., XI., & XII	12,621,967,900	11,044,221,969	
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)	(5,765,776,358)	
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	

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 study provided by the Owners in 2009. The Owners and the Municipalities timely appealed the informal conference decision setting the 2009 assessed value for the TAPS at \$7.71506816 billion.

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 the costs of construction attributable to the costs of the owners for a replacement pipeline such as supervising construction (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%.

In contrast to the Board's review of the Pro Plus cost study used for the 2008 TAPS assessed valuation, in 2009 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 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. The table below, from the Board's 2009 Certificate of Determination, shows these adjustments.

SARB 2009 Adjustments to TAPS Assessed Value

Scaling and Utilization Obsolescence						Calculation Check
Line Pipe, Fittings & P/L Const.						
\$	5,574,829,512	0.45	0.6147	1,096,202,462.00	\$ 4,478,627,050	\$ 4,478,627,052
\$	6,689,795,414	0.45	0.6147	1,315,442,952.40	\$ 5,374,352,462	\$ 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 Mgnt. Engineering Etc. & Owners Costs				
\$	894,292,650	Project Const Mgnment Etc.				
\$	1,192,390,200	Owners Costs @ 10%				
\$	14,010,584,850	Direct Costs less contingency & Owners Costs				
\$	3,502,646,213	Contingency @ 25%				
\$	172,493,800	ROW/Land				
\$	423,964,360	Ad Valorem Tax				
\$	1,694,892,472	Interest During Const				
\$	19,804,581,695	RCN				
\$	(9,365,586,683)	Physical Depreciation				
\$	10,438,995,011	RCN less Physical Dep.				
\$	(1,346,353,116)	Original Obsolescence				
\$	(219,240,490)	Additional Functional Obsol				
\$	8,873,401,405	RCNLD				
\$	172,493,800	Land and ROW				
\$	9,045,895,205	Total RCNLD rounded as of January 1, 2009				

I. 2010 TAPS Assessment

For the TAPS assessment process for 2010, the Division originally used the untrended 2009 RCN with adjustments. After an informal conference, the Division made adjustments to its

original 2010 valuation, setting the 2010 assessed value for the TAPS at \$9.20346143 billion. At the 2010 hearing before the Board, 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.

After the hearing, but before the Board's deliberations were complete, the Alaska Superior Court issued an initial decision following trial de novo on the appeal of the 2006 Assessed Valuation of the Trans Alaska Pipeline System.⁶ The Court set its adjusted value of TAPS for 2006 at \$9.977934. The Board then reviewed the Court's decision on the 2006 TAPS assessment before it completed its deliberations on the 2010 assessment. The Board determined that while the Division's \$9.20346143 billion valuation for 2010 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.

SARB – Table 4 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.

⁶ Alaska Superior Court Case No. 3AN-06-8446-CI. This subsequently went through a reconsideration process.

SARB - TABLE 4				
<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	<u>ADDED MUNI CALCULATION</u>
CONSTR. INTEREST	\$0	\$21,091,520	CONSTR. INTEREST	<u>ADDED MUNI CALCULATION</u>
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	<u>PHYSICAL DEPR TO 2045</u>
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)	<u>USED DOR METHOD</u>
LESS SR	\$10,788,808,192	-\$123,999,861	FUNCTIONAL OBS (SR)	<u>USED DOR METHOD</u>
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	

The Owners' primary new challenge to the Division's 2010 assessment 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. 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.

The Board determined that it would not have been proper to base the 2010 RCN 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. The Board found that that the pipeline designed in the Stantec cost study did not have equal utility to the TAPS on the 2010 assessment date. The Board concluded that it would not have been 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 Board found that the 30-inch diameter pipeline used for the Stantec study would not perform similarly to the TAPS at the TAPS' legally required maximum required throughput capacity.

III. 2011 TAPS Assessment Process

Less than three months before the assessment date of January 1, 2011, the Alaska Superior Court issued its final decision following reconsideration in the previously-mentioned appeal of the 2006 Assessed Valuation of the Trans Alaska Pipeline System.⁷ The Court's 2006 valuation of the TAPS was much closer to the valuations that the Division and the Board made in recent years than to the Board's 2006 valuation.

The Division had set the assessed value of the TAPS in 2006 at \$3.641 billion. The Board had increased this value only to \$4.3062718 billion. After extensive discovery and a lengthy trial, the Court determined that both the Division and the Board had significantly undervalued the TAPS in 2006, primarily due to their reliance on the cost study prepared for the Owners by Mustang. The Court found that the RCN produced by Pro Plus was reliable despite the challenges made to that cost study by the Owners. The Court set its adjusted value of TAPS for 2006 at \$9.977934 billion. As the Municipalities pointed out at the 2011 hearing, this is more than double the Board's 2006 value, and almost three times the Division's value.

For the TAPS assessment process for 2011 the Division did not use the updated Pro Plus cost study for its RCN. Instead, despite the Board's finding in 2010 that the use of the Owners' Stantec 30-inch pipeline cost study to value the TAPS in 2010 would have been improper, the Division used the Owners' updated Stantec cost study for a 30-inch diameter pipeline to replace the 48-inch diameter TAPS to value the TAPS for 2011. The Division issued a Notice of Assessment, originally setting the 2011 assessed value for the TAPS at \$6.71365707 billion, reducing the Court's 2006 value by almost a third for the 2011 assessment. The Owners and the Municipalities timely appealed the 2011 assessment to informal conference.

The Division considered the appeals filed by the Owners and the Municipalities in issuing Revenue Decision number 11-56-09. The Division made adjustments to its original 2011

⁷ Alaska Superior Court Case No. 3AN-06-8446-CI. Citations and quotes from the *Amended Decision Upon Reconsideration Following Trial De Novo* issued in that case will simply use the reference "Court at Paragraph" followed by the number of the paragraph in the final decision that is being cited.

valuation based on information taken into account during the informal conference process. The Division abandoned the RCN developed in the cost study that had been prepared for the Owners by Stantec and issued its revenue decision setting the 2011 assessed value for the TAPS at \$7.9329798 billion.

For this new value the Division used an updated Pro Plus cost study for the RCN after adjusting the interest rate during construction. The Division used the Court's methodology for applying a super-adequacy scaling adjustment. However, the Division made significantly different findings on projected throughput and minimum mechanical throughput, which resulted in an end of economic life estimate of 2040 in contrast to the Court's finding a few months before that end of economic life for TAPS for AS 43.56 assessment purposes was 2047. The Owners and the Municipalities timely appealed the Division's Revenue Decision to the Board.

At the hearing on the 2011 TAPS appeal, the Division argued that it was the only party that had used the Court's decision as a roadmap to arrive at its estimate of the TAPS value on January 1, 2011. While the Board finds the Division's claim to be generally true, the Board finds that the Division improperly deviated from the route established by the Court when working its way through estimating the economic end-life of the TAPS.

The Board concludes that it should ensure that the 2011 TAPS assessment was consistent with Court's decision. The Board finds the Division's valuation improper because the Division, without adequate evidence, failed to give the findings and conclusions in the Superior Court's decision on the 2006 TAPS appeal proper weight in making its economic end-life calculation for the 2011 assessment.

After reviewing the Court decision with the other evidence in the record, the Board has made an adjustment that views as consistent both with what the Court decided in the 2006 appeal and the evidence presented for the appeal of the 2011 assessment. Having made this single adjustment to the Division's RCNLD valuation, the Board determines that the 2011 assessed valuation of the TAPS should be set at \$8,671,720,679.

The table below shows the calculations the Board made to arrive at its adjusted 2011 RCNLD calculation.

SARB 2011 Adjustment to TAPS Assessed Value

\$21,682,301,247	RCN
(\$175,501,400)	ROW
\$21,506,799,847	RCN - ROW
48.4848%	PHYS DEPR %
\$10,512,630,908	PHYS DEPR \$
\$11,169,670,339	RCN - ROW & PHYS
(\$299,825,833)	SR
\$10,869,844,506	RCN - ROW & PHYS & SR
21.84%	SCALING ADJ %
\$2,373,625,227	SCALING ADJ \$
\$8,496,219,279	RCN - ROW & PHYS & SR & SCALING
\$175,501,400	ROW (ADD)
\$8,671,720,679	TOTAL VALUE

IV. Board's 2011 Adjustment

The Board is persuaded by its review of the court decision and by the Municipalities' presentation that one adjustment to the Division's 2011 assessment should be made. The Board's adjustment to the Division's economic end-life is discussed below.

History of TAPS Economic End-life Estimates

Since the first TAPS assessment appeal before the Board in 2001, there have been two components used to the project estimates of the economic end-life of the TAPS. The first component 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 2010 and for the Court's end-life estimate, these estimates were prepared 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. This is the determination of what the daily throughput will be when mechanical problems from low flow rates, such as waxing and icing, make it impossible to continue to operate the TAPS as it is currently configured.

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 economic end-life of the TAPS, the Division used its own future throughput projections prepared by Dudley Platt, 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 Mr. Platt's annually updated 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 minimum mechanical throughput of 200,000 barrels per day resulting in an estimate that the economic life the TAPS would run 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 Mr. Platt's 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 improper because the Division had not provided 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. 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.

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 estimate economic end-life.

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 earlier 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, which indicated that the economic end-life will be later than 2042, the Division's assessor chose to rely on the 2009 number and abandon the methodology used to arrive at that number. Instead of applying a methodology to determine end-life, it appeared to the Board in 2010 that evidence that broadly indicated that the economic end-life will be later than 2042 was used to justify not changing that number. This new approach failed to establish a coherent methodology for determining the TAPS' economic end-life for future assessments.

This new approach was improper. Rather than estimating the minimum mechanical

throughput of the TAPS, in 2010 the Division had first decided not to change the economic end-life from 2042 and then determined that the Department's throughput projections were not sufficiently inconsistent with that end-life to justify changing it. In 2010 the Division effectively backed into its minimum mechanical throughput number of 142,000 barrels per day after determining its end-life estimate rather than first determining the minimum mechanical throughput and using that number to determine economic end-life.

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

While it was the Division's failure to use a coherent methodology to estimate the TAPS economic end-life—rather than any weakness in the Division's evidence regarding its future throughput projections—that led to the adjustment in 2010, it was both the Division's reliance on its throughput projections and its determination that minimum mechanical throughput was 150,000 barrels per day that led the Board's conclusion that the Division's estimate of TAPS economic end-life was improper in 2011. Between 2010 and 2011 the Court's final decision was issued which established guidance that the Division improperly failed to follow in these two components of its end-life estimate.

The Board is still concerned about the extent to which the Division's perception regarding the range of acceptable end-life estimates, rather than strict adherence to the established methodology, may have driven its end-life estimate. In 2011 the Division apparently still had discomfort with the what its throughput forecasts indicate about TAPS end-life production given the Court's findings regarding minimum mechanical throughput and other evidence showing an end-life no sooner than 2047. Instead of taking a hard look at the possible shortcomings of its production forecasts in light of the Court and the Board's findings in 2010 on future throughput and ANS reserves, in 2011 the Division changed its minimum mechanical throughput from 142,000 per day to the rounder number of 150,000 barrels per day, and then removed Point Thompson gas liquids from its own throughput projections. This approach resulted in an estimated economic end-life of 2040 for TAPS.

Minimum Mechanical Throughput

The Board finds that the Division's failure in 2011 to give more weight to the Court's findings on minimum mechanical throughput was improper.

At paragraphs 389 through 392 and paragraph 405 of the decision on the 2006 appeal, the Court made explicit findings regarding minimum mechanical throughput based on the extensive record produced for the trial de novo. The Court first observed that a finding that the TAPS as currently configured could operate at 150,000 barrels per day was not supported by the evidence presented at the trial de novo.

The Municipalities presented the testimony of Dr. Modisette to support their position that TAPS could operate down to a throughput of 150,000 bbl/d. While the Municipalities did demonstrate that the oil can continue to flow in a steady continuous flow when throughputs are 150,000 bbl/day or less, they did not persuasively demonstrate that TAPS as currently configured, including its post-SR pumps and all other components of the equipment and machinery which together comprise TAPS, has the mechanical ability to operate below 200,000 bbl/d. The Department and SARB's determination in 2006 to use 200,000 bbl/d as the lowest mechanical throughput capability of TAPS is upheld. [Court at Paragraph 390]

But as discussed above, the Municipalities failed to establish by a preponderance of the evidence that TAPS as currently configured will be a technically and economically viable mode to transport that oil when production falls below 200,000 bbl/d. [Court at Paragraph 405]

The Court then found that the TAPS as currently configured could operate at 200,000 barrels per day or lower:

The Court finds that TAPS as currently configured can operate at least down to 200,000 bbl/d, although heaters will be necessary at some point before that as throughput decreases. [See Ex. MUN-586 at 12- 13; Tr. 3391, 3424-38 (Modisette)] The extent to which heaters are needed before throughput falls below 200,000 bbl/d is not relevant to the economic life of the pipeline but could be an issue related to the extent of the pipeline's functional obsolescence. [Court at Paragraph 391]

In 2011, the Division based its estimate of minimum mechanical throughput at 150,000 barrels per day without any changes having been made to the TAPS that would significantly reduce its minimum mechanical throughput since Court's findings. The Board finds that there was no new evidence on the minimum mechanical throughput of TAPS that had not been considered

by the Court that made it justifiable for the Division to deviate from those findings. The Division based its determination that minimum mechanical throughput is 150,000 barrels per day on the study it had conducted showing that all low flow issues being set to one side, the TAPS could operate at or below 100,000 barrels per day. This showing, however, does “not persuasively demonstrate that TAPS as currently configured, including its post-SR pumps and all other components of the equipment and machinery which together comprise TAPS, has the mechanical ability to operate below 200,000 bbl/d.”

As indicated by the Court and as the Board noted in its 2009 Certificate of Determination on the TAPS appeal, the job of the assessor, in this case the Division, is to value the pipeline that was actually there on the assessment date. It is not clear how the Owners are going to deal with low flow problems and what it will cost to cure these problems, as the TAPS is currently configured. While the TAPS hydraulics study prepared for the Division provided insight into one aspect of minimum throughput, by setting other low flow problems, such as icing, waxing and internal corrosion, to one side, that study could not provide evidence to refute the Court’s findings on TAPS minimum mechanical throughput.

Projected Throughput

The Board finds that it was improper for the Division to rely on throughput projections that were inconsistent with the Court’s findings on throughput and ANS reserves without persuasive evidence that its projections were more accurate than the evidence relied on by the Court. The Board finds it was unreasonable for the Division to represent that it could not provide a better explanation for the basis for its estimation of remaining proven reserves at the 2011 hearing without the disclosure of confidential information. Given the Division’s decision not to follow the Court’s findings on reserves and projected throughput, at least a summary demonstration of field-by-field quantity in each of the three tiers of “in production,” “under development” and “under evaluation” was expected by the Board. The Board does not seek to substitute its expertise, analysis or judgment for that of the expert witnesses presented. The Board does seek to evaluate the credibility each witness and the reliability of their work. In order to best do its job of evaluating the reliability of the Division’s expert’s work, the Division will need to make more

effort than it did in 2011 to explain why its throughput projections were based on the best available information on ANS reserves.

The Court criticized the Parties and the Board for failing to use throughput projections based on the best available information on ANS reserves.

The determination of the amount of proven reserves should be assessed in light of the evidence available to, and presented by each of the parties. [See Order (June 27, 2008); Ak. Civil Pattern Jury Instruction 02.23] The Owners did not offer witnesses to testify about non-publicly available ANS reserves information, including any witness to rebut the statements contained in the BP Royalty Trust filings and confidential reserves information produced in discovery. The evidence that has been produced at the trial de novo persuasively demonstrated that as of the lien date, the proven reserves that were then technically, legally, and economically deliverable to TAPS were sufficient to keep TAPS in operation through at least until 2047 with a minimum assumed throughput of 200,000 bbl/d. The Department and SARB's use of 2042 was improper and inconsistent with the requirements of AS 43.56. [Court at Paragraph 411]

At the 2011 hearing, three witnesses were presented on the issue of reserves. Two of these witnesses presented original work and one merely criticized the work of the other two. All three appeared to have adequate education and experience to produce expert opinions. All three opined that the estimation of recoverable reserves, future rates of production and end of field life was difficult, the answer lies in a range, and that there is a great range of uncertainty as we look to the future.

These expert witnesses referred to prior years' testimony when speaking to the estimation of reserves. Taken as a whole, no evidence showing significant changes in the ANS reserves, relative to prior years, was offered by any these witnesses. In general, the same oil fields exist as did when the Court heard the evidence presented by these same parties. No significant new discoveries adding or subtracting from the existing oil fields or the amount of oil they contain have been made since that time.

There was testimony that ongoing exploration and development and new technology is being employed which is expected to produce additional oil from existing fields and new fields under development. There was no testimony showing that proven reserves should be defined other

than as Court did. The Board applies the definition provided by the Court in its decision on the 2006 appeal at paragraph 356.

The Board finds that the evidence showed that it was improper to exclude (as the Division did in its 2011 end-life estimate) reserves that the Court had included in its 2006 determination that were not transported through the TAPS between the 2006 and 2011 assessment dates. The Board also finds that the Division's failure to give more weight to the Court's findings on ANS reserves and TAPS projected throughput was improper.

At paragraphs 392 through 393 of the decision on the 2006 appeal, the Court made explicit findings regarding ANS reserves and projected throughput based on the record produced for the trial de novo, which included confidential information covered by a protective order.

In addition, the confidential proposed findings of the Municipalities reference portions of the record that further supports their assertion that proven reserves will exceed 200,000 bbl/d production until at least 2047. Specifically, the Municipalities' proposed confidential findings ¶¶ 491, 503-505, filed October 30, 2009, are incorporated herein by reference and adopted by this Court as if fully set forth herein. [Court at Paragraph 408]

The evidence that has been produced at the trial de novo persuasively demonstrated that as of the lien date, the proven reserves that were then technically, legally, and economically deliverable to TAPS were sufficient to keep TAPS in operation through at least until 2047 with a minimum assumed throughput of 200,000 bbl/d. [Court at Paragraph 411]

The throughput projection that Mr. Molli provided used a well-by-well rather than field-by-field focus. Mr. Molli's well-by-well focus may be more accurate in the short-term and less accurate in predicting when ANS production will fall below 200,000 barrels per day. The throughput projections that Mr. Molli provided for the 2011 TAPS hearing indicate that TAPS throughput would reach 200,000 barrels per day in 2038. This date would be reduced by another two years if Point Thompson gas liquids were removed as the Division did for its 2011 end-life estimate, which brings the Division's production forecast closer to the Owners' expert in the 2006 case than it does to the reserves and throughput data that the Court relied on. The Court explicitly rejected the throughput projections of the Owners' expert.

The Owners' reserves expert, Ms. Wall, opined that historic ANS production suggests most of the North Slope fields are experiencing exponential declines in production. [See, e.g., EX. TO-6 at GA000052] In her opinion, this means that TAPS will reach 200,000 bbl/d in approximately 2034. [Id.] But the evidence presented at the trial de novo persuasively demonstrated that Mr. Platt was reasonable in projecting production to decline in most North Slope fields at a hyperbolic, as opposed to exponential, rate. [R. 0980-0981]. [Court at Paragraph 399]

The Board finds that Mr. Molli's throughput estimates were not reliable the purpose of estimating the TAPS' end-life. The Division's decision to diverge from Mr. Molli's throughput estimates by removing Point Thompson gas liquids further undermines the Division's approach to estimating throughput. The Board finds that the Division's reliance on Mr. Molli's throughput estimates as adjusted by the Division underestimates the remaining economic life of TAPS based on the remaining proven reserves.

The Court based its throughput estimate primarily on Dudley Platt's throughput projections as interpreted by the witnesses at trial. The Board finds, as the Court did, that Dudley Platt's throughput projections were reliable, and finds none of the bias toward overestimation of future TAPS throughput in those projection that was alleged by the Division and the Owners in the 2011 hearing before the Board.

For the 2011 hearing, the Municipalities provided four different throughput forecasts prepared by Dudley Platt. All his production forecasts estimate that TAPS' throughput will be at 200,000 barrels per day in 2045. The Board therefore estimates the TAPS' economic end-life to be 2045 based on the evidence presented. The Board uses the 2045 end-life estimate in calculating its adjusted 2011 adjusted value. However, the Board recognizes that additional throughput and reserves evidence presented on appeal may show that the economic end-life is 2047 or later.

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

The Board concludes that only the adjustment discussed above should be made to the Division's updated 2011 assessed value of the TAPS. The Board concludes that neither the

Municipalities nor the Owners have 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 concludes that there was no further adjustment needed to bring the 2011 assessment into conformity with the Superior Court's decision.

Consistent with prior practice and the Court's findings, the Division appropriately did not 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.

The Board does not believe it can make the adjustments to the Division's depreciation deductions requested by the Municipalities and remain consistent with the Court's findings in the 2006 TAPS appeal. The Board shares some of the concerns articulated by the Municipalities and believes that the Division and the Court's approach may result in over depreciation of the TAPS. The Board agrees with the Municipalities assessment that the current economic environment as relates to the TAPS shares many similarities with the economic environment in existence when the TAPS was originally built. The Board also questions whether, when looking at the issue of obsolescence and depreciation from an economic perspective, the Division's approach inappropriately ignores the value the TAPS has, due to its potential ability to serve other reserves not included in either the Division's or the Municipalities' forecasts.

The Board again finds that the Division's reliance on Pro Plus was reasonable. The Board again finds that the Division's decision not to rely on the Stantec cost study was not only reasonable but that it would have been improper for the Division to have relied on that study for its RCN. The Board finds that use of this redesign, costing a hypothetical property that is so different from the existing property, to measure obsolescence, is an extreme and inappropriate use of this appraisal technique. All of the components of the existing property contribute to its value, and will probably continue to do so even as the TAPS is reconfigured in the future to adjust to different flow rates.

One area of bias that is implied by the Court's findings is the historical bias toward gross undervaluation of the TAPS by both the Division and the Board that resulted from their reliance on the earlier Mustang cost study put forward by the Owners.

While the Board has historically added to the Division's TAPS values, bringing them more in line with the Court's findings in the 2006 appeal, the Division itself has been responsible for most of the changes that have led to more accurate TAPS values in recent years. These changes have largely been the result of the Division's choice of cost studies, which resulted in making the assessment process more transparent. In recent years, the Division has relied on publicly assessable information in the form of the Pro Plus study offered by the Municipalities to develop its TAPS value. Because the Division was not restricted by concerns about taxpayer confidentiality, both parties had access to and the opportunity to review the information used in setting the assessed value of the TAPS. This is a marked contrast to the limited access to information that was provided to the Municipalities, the Division and the Board when the Division relied on the Mustang cost study provided by the Owners for the 2006 TAPS assessment. As the Court noted in its decision:

Evidence presented at the trial de novo to this Court persuasively demonstrated that in 2006, the Department and SARB were not able to obtain all of the necessary detail from Mustang to properly confirm the accuracy of that cost study. [Court at Paragraph 134]

The Board commented extensively in its 2010 Certificate of Determination on the TAPS appeal on the potential problems created when the Division fails 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. The Board observed that, due to the Division's inability to provide adequate transparency in 2010 in its AS 43.56 assessment process, that process was close to broken and was headed in the wrong direction.

Unfortunately, despite both the Court and the Board's comments and the historical undervaluation that has resulted, at least in part, from this lack of transparency in the assessment process, the process for the 2011 TAPS assessment was even less transparent, and resulted in an RCN in the original assessment that was based on a new 30-inch redesign cost study that the

Municipalities had no meaningful opportunity to review before the appeals process began.

While the Division is correct that it should base its valuation on the best information available, it should be hesitant to give much weight to new information that all the interested parties have not been given a meaningful opportunity to access before the assessment.

In addition to identifying some fundamental flaws in the updated Stantec study itself, such as the unrealistically low contingency, the Board again finds that the 30-inch redesign of the assessed property would have mechanical and performance characteristics that would be too different from the existing pipeline and its capabilities to provide a useful estimate of value. A 48-inch diameter 800 mile pipeline system is what was in place on the 2011 assessment date. All the components of the current system continue to contribute to value in anticipated future use. Even the Mustang cost study reviewed by the Court recognized the unique utility of the TAPS 48-inch pipeline:

Mustang used design criteria for a 1.0 million bbl/d maximum throughput. Like Pro Plus, it also determined that a 48-inch pipe would be the most cost effective to fabricate and operate, assuming no use of drag reducing agents. [Court at Paragraph 162]

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) interest during construction; (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 estimate of the economic end-life of TAPS was improper. Although the Board is concerned that the application of both age-life depreciation and scaling may be resulting in an over depreciation of the TAPS, the Board concludes that the Division properly applied both, consistent with the findings in the Court's decision.

The Board has some concerns about the Division's use of 4.55 % for the interest rate during construction, but finds that the Division's choice was both reasonable and adequately supported by the evidence presented at the hearing. The Division's assessor has the legal authority to chose a method, evaluate the information and arrive at a conclusion of value. His conclusion is

entitled to a presumption of correctness. An alternative opinion that is better reasoned should not be substituted for the assessors unless there is an error, incorrect foundation in fact, wrong application of appraisal principal, error in calculation, fraud or willful misrepresentation.

The assessor in turn should seek to follow a precedent established in a similar case by the Court or the Board. If the assessor believes that the facts in the assessment are distinguishable in ways that support a different result than that indicated by prior precedent, the assessor should first acknowledge the prior precedent and explain why it is not being followed in the present case. Similarly, if the Division determines that it should not follow the direction set in a prior appeal, the Division should clearly acknowledge that it is doing so and explain its reasoning.

VI. Conclusion

Taxpayers and municipalities should be able to place some reliance on the findings and conclusions in the determinations of the Board and an extensively litigated appeal of an AS 43.56 assessment of the same property before the Superior Court. While each assessment is different, each assessment is subject to established precedent, and most assessments involve property with some prior valuation history that the assessor should not ignore. The Division should give careful consideration to the potential downsides of adopting a new approach to valuing a property with a long history of litigated assessments. While it may sometimes be appropriate to take this step, the result will be the increased volatility in the assessment process that the Division warned the Board to try to avoid in its opening arguments. Based on the evidence presented, the Board has concluded that the Division failed to give adequate weight to the Court's findings and conclusions in the appeal of the 2006 TAPS assessment in determining the economic end-life of TAPS for the 2011 assessment.

The Board has found that with this exception, 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. Due to its abandonment of its initial reliance on the Stantec cost study, with the exception of its economic end-life estimate, the Division's valuation of the TAPS was consistent with the finding and conclusions in Court's Decision. Based on the limited throughput and

reserves information in the record before it, the Board again determines that the best estimate of the economic end-life of TAPS as of the 2011 assessment date is 2045, in contrast to both Division's estimate of 2040 and the Court's finding for the 2006 assessment of 2047. Although the Board has concerns that the TAPS may be over depreciated as the result of the application of both scaling and age-life depreciation, especially as a jurisdictional limitation is being applied to one component of the age life depreciation estimate, the Board has applied the Division's and the Court's methodology for accounting for super-adequacy of the TAPS, due to reduced throughput, by scaling.

The Board has concluded the Division appropriately used the Pro Plus cost study for its estimate of the TAPS Replacement Cost New as of January 1, 2011. The Division correctly chose to base its assessed value on this study rather than a cost study of a 30-inch diameter redesign of the TAPS. The Division reached reasonable conclusions analyzing the information in the Pro Plus cost study as well as information on other approaches to value, in accordance with standard appraisal methodology, to obtain its 2011 estimate of the TAPS value.

The Board has concludes that the Division's 2011 assessed valuation of the TAPS, set at \$7,932,979,800, should be adjusted as set forth above. The resulting value, \$8,671,720,679, is now set as the 2011 assessed value of the TAPS. This adjusted value follows the course methodology in the 2006 decision with differences in the interest rate during construction and the economic end-life.

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 31st day of May, 2011.

Signed _____
Don Martin McGee, Chair
State Assessment Review Board

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