

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

In the Matter of:	)	
	)	Appeal of Revenue Decision
THE TRANS-ALASKA PIPELINE SYSTEM	)	No. 15-56-09
	)	
Oil & Gas Property Tax (AS 43.56)	)	OAH No. 15-0360-TAX
<u>2015 Assessment Year</u>	)	

**CERTIFICATE OF DETERMINATION**

**I. Introduction**

The State Assessment Review Board (Board) convened from May 18, 2015 through May 22, 2015 to hear and deliberate on the appeals of the 2015 assessment of the Trans-Alaska Pipeline System (TAPS).<sup>1</sup> The owners of TAPS (Owners) and three affected municipalities (Municipalities) appealed Revenue Decision (ICD) number 15-56-09, which assessed TAPS at \$7,688,845,940, as of January 1, 2015. The appeals were consolidated. The Owners argued that the value of TAPS in 2015 was \$2,610,000,000.<sup>2</sup> The Municipalities argued the value was at least \$15,476,301,860.<sup>3</sup>

During the 2015 hearing, testimony about the timing of the delivery, and confidentiality restrictions for the cost studies for 2015, made clear that the Tax Division (Division) did not have time to review the Owners' or the Municipalities' cost estimates prior to issuance of the Division's Revenue Decision. It is this issue that seems to continue to leave the Division handicapped when it comes to using the most recent data. The Division has been urged to use the most recent estimates, and the Pro Plus estimate has historically been selected as the most accurate and reasonable of all of the cost studies.

Portions of the 2015 Pro Plus cost study are the result of prior studies that have been scrutinized, criticized, and corrected where errors were found, debated, and used in assessments for prior years. The Pro Plus cost team and the Municipalities have corrected for problems found in those studies continuously throughout the past six years.

---

<sup>1</sup> Chair James I. Mosley, and members Bernard Washington, William Roberts, and Steven L. Van Sant heard the appeal. Administrative Law Judge Mark T. Handley from the Office of Administrative Hearings assisted the Chair. Under AS 44.64.020(6) and 44.64.030(b), the Office of Administrative Hearings provides administrative law judges to advise the Board at the request of the Commissioner of Revenue.

<sup>2</sup> TAPS Owners' Appeal of Alaska Department of Revenue Decision No. 15-56-09 at 16.

<sup>3</sup> Municipalities' Appeal from Alaska Department of Revenue Decision No. 15-56-09 at 40.

During the 2015 hearing, there was little persuasive criticism of the direct cost numbers contained within the Pro Plus cost estimate. There was more persuasive criticism about the methodology used in the calculations that occur after the direct costs are determined. It is these differences that result in such a large disparity of Replacement Cost New Less Depreciations (RCNLDs) advocated by the opposing sides to the appeal.

The Division did not use a latest cost study as the basis for the initial direct cost, because the Division simply did not have it. Given the problems that the Division identified with the timing and restrictions on the parties' filings of their 2015 cost studies, trending forward an RCN from the 2009-year assessment was understandable, but not the best choice. Simply stated, the direct costs from the more recent cost studies done in 2013 and those updated again in the 2014 RCNs would have been a better start point if short-term trending were to be selected. In the last two Board determinations, the Division's trending forward the 2009 RCN was found to have been improper. Yet, given the circumstances, the Board defers to the Assessor's decision, with certain limited modifications.

The Board did find that the Division's use of an inappropriate contingency, and the incorrect scaling calculation, was improper and did not follow the methodologies set out by Board. As a consequence, The Board made adjustments to the Division's assessed value.

The Board recalculated the Replacement Cost New Less Depreciation (RCNLD) estimate for the TAPS. The Board certifies that the value of TAPS on January 1, 2015 was \$9,609,190,960.

## **II. The property being assessed**

### **A. Description of the property**

TAPS is an 800-mile long, 48-inch diameter, crude-oil pipeline stretching from the oil fields of the North Slope to the port terminal in Valdez, Alaska. TAPS includes pump stations, buildings, materials, supplies, machinery, tanks, terminal facilities, and other related property. TAPS is the only conduit for the transportation of oil from America's most productive petroleum region. The construction of TAPS was completed in 1977. The expected economic life of TAPS in 2015 is estimated to last to the year 2068.

TAPS is located in the Municipalities of the City of Valdez, the Fairbanks North Star Borough, the North Slope Borough, and in the Unorganized Borough of Alaska. TAPS also has taxable property 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 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. Unocal Pipeline Company, 4800 Fournace Place, Bellaire, TX 77401-2324

**C. Parties appealing**

The parties to the appeal are the TAPS Owners and the following Municipalities: North Slope Borough, Fairbanks North Star Borough, and the City of Valdez.<sup>4</sup>

**D. Consolidation and coordination of appeals**

The Owners' and the Municipalities' appeals of Revenue Decision No. 15-56-09 were consolidated, and the different Owners and the different Municipalities each coordinated the presentation of their cases.<sup>5</sup>

**III. History of TAPS assessments**

The valuation of TAPS has changed significantly over the years. In the years before 2001, the Division and the Owners negotiated an agreed valuation of TAPS with little, if any, participation by the Municipalities or the Board. Beginning in 2001, however, both the Municipalities and the Owners participated in proceedings with the Division and the Board. Although the Division and the Board had earlier relied on other appraisal methodologies, by 2005, both began to rely primarily on the appraisal methodology known as the cost method. To implement the cost method, the Division has to calculate the "replacement cost new" for the property being assessed. As development of this methodology unfolded during the succeeding 10 years, various depreciation components have been developed and applied consistently to the RCN. This calculation is frequently referred to by the acronym "RCNLD."

The Board's 2006 decision was based on an RCNLD cost approach valuation. This

---

<sup>4</sup> The Owners were represented by attorneys F. Steven Mahoney, Michael R. Garatoni, James Torgerson and James M. Seedorf. Assistant Attorneys General Kenneth J. Diemer and Ashley Brown represented the Alaska Department of Revenue, Tax Division. The Municipalities were represented by attorneys Robin O. Brena, Laura S. Gould and Jon S. Wakeland for the Fairbanks North Star Borough and the City of Valdez; and Jessica Dillon and Molly Brown for the North Slope Borough.

<sup>5</sup> See Pre-Hearing Order issued April 24, 2014.

valuation included a cost study prepared by a team hired by the Owners to estimate how much it would cost if TAPS were to be replaced. Both the Municipalities and the Owners appealed the Board's decision to the Superior Court, and the resulting litigation lasted several years. The Superior Court conducted a five-week trial de novo. Both parties presented newer cost studies that were significantly more detailed, and that were prepared by different teams, than the cost study presented to the Board in 2006.

Beginning in 2008, while the court trial of the 2006 assessment was underway, these more detailed cost studies were presented to the Division and the Board. Relying on the new information, both the Division's and the Board's valuations began to increase. In May 2010, the Superior Court released its initial decision in the appeal of the Board's 2006 valuation in time for the Board to apply many of the Court's valuation approaches to the Board's 2010 Certificate of Determination. This decision generally confirmed the methodology that the Board used, and that the Pro Plus cost study team's work, which the Board had relied on in recent years, was appropriate for setting the assessed value of TAPS. In February 2014, the Alaska Supreme Court affirmed the Superior Court's decision regarding the 2006 valuation, and the RCNLD methodology.<sup>6</sup>

The Alaska Supreme Court's 2014 decision on the Superior Court's decision on the 2006 TAPS valuation put to rest some of the issues that have been contested in recent appeals. The courts held that the Board is not required to use a fair market valuation standard, and ruled in support of the Board's use of only one methodology, RCNLD, to assess TAPS.<sup>7</sup> In addition, the Supreme Court affirmed the Superior Court's approval of the Board's general approach to depreciation, including the definition and identification of "proven reserves" for purposes of calculating and applying depreciation.<sup>8</sup>

Although many methodological issues have been resolved, the appealing parties' positions on the assessed valuation of TAPS are still very far apart. This separation in the parties' positions is understandable, because the Owners want to minimize the taxes paid and the Municipalities

---

<sup>6</sup> *BP Pipelines (Alaska) Inc. v. State, Dep't of Revenue*, 325 P.3d 478 (Alaska 2014), reh'g denied (May 12, 2014).

<sup>7</sup> *BP Pipelines* at 483-490.

<sup>8</sup> *Id.* at 491.

want to maximize tax revenues. Some issues remain in flux, particularly where facts change from year to year, or where the Court's approval of a particular approach leaves room for the Board to exercise its expertise.

The parties had also appealed the Board's valuation decisions for 2007-09; these tax years were consolidated for purposes of a trial. The trial in that consolidated appeal lasted 11 weeks.<sup>9</sup> On December 30, 2011, the Superior Court issued its decision, finding that the value for 2007 was \$8.941 billion, 2008 was \$9.644 billion, and 2009 was \$9.249 billion.<sup>10</sup>

Since 2006, the assessment process has followed a consistent pattern of events. Each year, the Division's Assessor releases the Notice of Assessment at the end of February. In making this preliminary assessment, the Division does not conduct its own cost study, but generally relies on cost studies and appraisals provided by the Owners and the Municipalities. Although the direct costs presented by all parties are relatively similar, the value estimates that result from these costs by each of the parties varies significantly. Those differences are primarily due to the way each party treats contingency, interest, scaling, and the components. The parties' estimated values have usually been higher in the case of the Municipalities, and lower in the case of the Owners, than the Division's assessed value for the prior year.

The Owners and the Municipalities consistently appeal the Notice of Assessment, and the Division provides the parties with an opportunity for informal conferences. Since 2005, both parties have appealed the resulting ICDs to the Board. Furthermore, each of the Board's decisions has been appealed to the Courts since 2005.

Because the Assessor, the Board, and the Courts have all adopted the RCNLD cost approach for valuing TAPS, the hearings before the Board are generally a battle over RCNLD estimates. This year the battles included arguments about the applicable contingencies, interest rates, scaling, components, and end of life calculations.

The Board's approach in establishing the value for the TAPS since it was first presented with a cost study has been based on the evidence presented on the replacement cost new. In some years, this means that the Board has had to work with a cost study that had components or pieces

---

<sup>9</sup> *Decision Following Trial De Novo*, (Alaska Superior Court No. 3AN-06-08446 CI (Dec. 30, 2011)) at 1 ¶ 3 (“2007-09 Decision”).

<sup>10</sup> *Id.* at 213 ¶ 599.

of the overall cost challenged by the other parties. Where more reliable evidence of costs was provided, the Board has made necessary corrections to the Pro Plus cost studies. In evaluating a replacement cost study, the Board has preferred to treat a study as an integrated product. In the past, the Board has made changes to an input included in the study. If the Board finds an error with the input, then the change can be made without affecting the perception of the overall accuracy of the study. Because depreciation calculations are a separate matter, the Board has historically carefully scrutinized the parties' proposed depreciation methodologies. The assessments of TAPS since 2006 have been as follows:

<b>Assessments of TAPS since 2006 (\$Billion)</b>				
<b>Year</b>	<b>Division</b>	<b>Board</b>	<b>Superior Court</b>	<b>Supreme Court</b>
2006	\$3.641	\$4.31	\$9.977 (2010)	Affirmed (2014)
2007	\$4.578	\$4.589	\$8.941 (2011)	Pending
2008	\$7.166	\$6.154	\$9.644 (2011)	Pending
2009	\$7.715	\$9.046	\$9.249 (2011)	Pending
2010	\$9.203	\$9.639	Pending	
2011	\$7.933	\$8.672	Pending	
2012	\$8.25	Settlement		
2013	\$7.164	\$11.874	Pending	
2014	\$5.748	\$10.213	Pending	
2015	\$7.688	\$9.609		

As can be seen from the information on annual values set out above, the Board's values for TAPS increased significantly after the court decision in 2011. This is due primarily to the Board having agreed with the reasoning for the increases in the Pro Plus cost studies that the Board reviewed in recent years.

As the Owners pointed out at the 2015 hearing, there was another significant increase in the 2015 RCNLD value put forward by the Municipalities after the Court decision. The Owners maintain that there were insufficient economic changes to justify this increase in the cost of replacing TAPS. This increase is due in part to a change in how to more accurately account for the contingency by relying on what the numbers show to be the actual mid-point risk for an over-run, rather than an arbitrary adjustment to that number. The Board's acceptance of this approach to contingency was encouraged by language in the Court decision. The Board's recent decisions have included these mid-point contingency percentages. Another driver of higher values is the Board's use of the mechanical design capacity for the RCN TAPS, rather than the original TAPS for calculating the scaling deduction for depreciation for economic obsolescence due to excess capacity. The other significant driver in the Municipalities' 2015 RCNLD was their change to a 2100-year end of life.

A valid improvement to the cost estimation process may result in valid increases or decreases in assessed valuation from one year to the next that are not dependent on economic changes that would be expected to influence the value of the assessed property. If the assessed value of a property was significantly higher or lower for the prior year because a less reliable method was used to calculate a component of the value for that year, the assessed value of that property would properly change the following year based on just this improvement in the accuracy of the assessment.

Since 2013, the values certified by the Board have trended down, as would be expected with increased depreciation due to being another year closer to the projected economic end-life. Adding more economic obsolescence due to scaling the reduced throughput and adding more age-life depreciation, due to the reduction in the remaining proven reserves to be produced, decreases the estimated value of the TAPS. These reductions are only marginally offset by added reserves.

#### **IV. Proceedings**

On April 10, 2015, the Board met with the parties for a prehearing conference to discuss hearing procedures and deadlines. On April 13, 2015, Chair Mosley issued a prehearing order in conformance with the discussion at the conference.

The Municipalities of Valdez and Fairbanks North Star Borough filed a prehearing motion to disqualify Board Member Washington from hearing the TAPS appeal because he had been a

witness in earlier TAPS valuation hearings. The Board considered the motion, deliberated, and denied it.

The Municipalities and the Division filed a prehearing motion to prevent the Owners from introducing expert witness testimony about court rulings in the recent appeals of TAPS valuations for prior years, and on what the Board should do based on those rulings. The Board allowed this presentation to be included in the Owners' closing arguments, but not as expert witness testimony in the evidentiary portion of the hearing concerning value.

A public hearing was held from May 18, 2015 through May 21, 2015. The Municipalities and the Owners presented their appeals of the Division's Revenue Decision 15-56-09, which assessed TAPS at \$7,688,845,940, as of January 1, 2015.

At the hearing, the Division's assessor, James H. Greeley (the Assessor), explained that he based his assessment for the TAPS in 2015 on the trended 2009 RCN in part because the alternative 2015 versions of the RCNs that were provided by the appealing parties were not provided to him during the assessment process in a timely manner, and certainly not in time for him to evaluate whether they were more reliable than his trended 2009 RCN. The Municipalities and the Owners provided expert testimony on their estimates of value. The direct costs presented by each party were discussed by each of the parties at the hearing. All were relatively close to each other in direct costs. The wide differences in each party's final RCN estimates, as has been previously stated, were mostly due to the differences in how each party calculated contingency, interest, and end of life.

The Board then deliberated in executive session. The Board chose to defer to the Assessor's selection of a trended RCN number to begin the calculations of assessed value. This decision resulted from the Board's finding that the Assessor had been handicapped by the timing of the delivery of each of the parties' proposed RCN.

The Board's decision not to overturn the Assessor's starting RCN is not an endorsement of his trending an old cost study, but rather the Board's agreement that the Assessor did not have a 2015 cost study in an appropriate time frame. The Board did not decide to rely on the 2013 or 2014 Pro Plus cost studies, because their use was not requested or focused on by the parties.

Only where the appellants met their burden of showing the Assessor's opinion was unequal, excessive, improper, or not in accordance with the standards set out in AS 43.56 did the



Board adjust the Division's valuation. The Board then used its independent judgment based on the evidence in the record to make the appropriate adjustments.<sup>11</sup>

## **V. The appealing parties' failure to meet their burden of proof**

### **A. The assessment is not unequal**

An assessment is unequal if the taxing authority treats one taxpayer differently than other similarly situated taxpayers. The appealing parties did not show that the assessment is unequal. This is in large part because no other pipeline is comparable to TAPS. TAPS is unique, and the fact that the Division commonly uses trending to determine the assessed value of other petroleum property is because those other properties have not had the benefit of the cost estimations for replacement that TAPS has enjoyed. Grounds for an unequal assessment were not the subject of this appeal and were not argued by any of the parties to the appeal.

### **B. The assessment is not excessive**

The Owners asserted that the assessment was excessive. The Owners relied on a replacement cost new study prepared by Stantec Consulting. The Owners used different reserves information than the Court used for the 2009 valuation of TAPS, and different reserves than those adopted by the Board in all of the ensuing years. The Owners' use of different reserves resulted in a significantly earlier economic end of life. The Owners reduced the RCN by deducting for Functional Obsolescence that the Division did not find. The Owners also used a different contingency for calculations than what both the Board and the Courts have used repeatedly. The Owners argued for an overall value of \$2.6 billion.<sup>12</sup>

The Stantec cost study determined that the direct costs for building a replacement 48-inch TAPS would be \$12.26 billion.<sup>13</sup> The Board's review of the evidence in the record showed that the Stantec study underestimated the costs of replacing the TAPS on the assessment date. For example, the contingency applied to the Stantec cost study was only 15.4%. This is much lower than the minimum 25% contingency that the Court stated it would be improper to go below as applied to the Pro Plus study that the court used to determine the RCN on multiple appeal years. Both the Court and the Board have consistently found the annual versions of the Pro Plus cost

---

<sup>11</sup> See 2013 Certificate of Determination at 15.

<sup>12</sup> TAPS Owners' 2015 Pre-Hearing Brief at 9.

<sup>13</sup> TAPS Owners' 2015 Pre-Hearing Brief at 21.

studies to provide estimates that are more accurate for the RCN of TAPS than the Stantec studies offered by the Owners. The Board also did not believe that the optimistic construction rates predicted in the Stantec estimate were achievable.

In sum, the Owners have based their conclusion that the assessment was excessive on their overall appraisal of TAPS and their version of the RCNLD. Because the Owners' advocated RCN is not persuasive evidence of the cost to replace TAPS, the Board found that the Owners did not meet their burden of proof to show that the assessment was excessive.

**C. Assessor's failure to use one of the appealing parties' 2015 RCN estimates was not improper**

The Board also identified issues with the Municipalities' proposed RCNLD. The Municipalities unsuccessfully attempted to persuade the Board to extend the end-of-life of TAPS to the year 2100, based upon a low flow rate closer to 30,000 barrels per day. The Municipalities also unsuccessfully tried to convince the Board to calculate cost of financing during construction based upon 70% or more equity. Additionally, in this year's changes of the direct cost of the RCN, the Municipalities introduced an additional risk into the equation for the potential of the project taking an extra year to complete. By introducing that extra year into the calculations, and by adding the contingency on top of that, without a corresponding reduction in the recommended contingency, the Municipalities inflated their RCN bottom line number significantly.

In 2015, the primary reason that the Assessor declined to use the 2015 Owners' Stantec study to determine the 2015 RCN of the TAPS was that the Owners failed to allow the Division to share the study with the Municipalities in time to vet that study for errors and criticism. The primary reason that the Assessor declined to use the Municipalities' 2015 Pro Plus cost study to determine the 2015 RCN for the TAPS was that he did not receive it in time to review the significant changes between the 2015 and earlier Pro Plus cost studies. The Board rejected both appealing parties' RCNs because neither party met its burden to show their RCN prevailed.

The Board found that it was not unreasonable for the Assessor to require that the 2015 cost studies be either agreed to by the parties, or filed in time and without distribution restrictions that prevented adequate review and vetting by the Assessor and the other party.

It was not unreasonable for the Assessor to decline to use either of the 2015 cost studies as a basis for valuation. Although the trending approach was rejected by the Board in 2014, the

Board was persuaded by the Division's arguments, and the evidence of the reasonableness of the Assessor's concerns about the two new cost studies.

The Board had concerns about computing the 2015 TAPS RCN by trending forward a 2009 RCN when more recent RCNs were available for trending, including the 2010, 2011, 2013 and 2014 RCNs for TAPS based on the Pro Plus cost studies for those assessment years that were vetted by the Board.<sup>14</sup> More recent estimates of cost, based on actual quotes from vendors and research in the market, are generally more accurate than trending forward older studies. In this case the Pro Plus Teams' experts have used the intervening years to correct mistakes and improve the methodology used in the 2009 estimate.

The Board hopes it will not revisit the circumstances surrounding the 2015 assessment in future assessments.

**D. The trended 2009 Pro Plus study will be the basis of the 2015 RCN start-point**

Because the Board has voted to accept a portion of the Division's assessment, the adjusted value of the Division's trended 2009 Pro Plus cost study as adjusted by the Superior Court will be the basis of the 2015 RCN. The Assessor corrected the errors in Vertical Support Members (VSM) costs that were identified after the Court decision was issued. The Division then trended this adjusted 2009 cost study forward to 2015.

The Board has some concerns about the accuracy of the Division's VSM error correction. Part of the problem with trending an old number is reflected in the compounding of errors when, for instance, a VSM correction has been made and trended even though the subsequent years' findings have already significantly refined that correction. The Board had similar concerns about the Assessor's treatment of ad valorem taxes for the 2015 determination.<sup>15</sup>

---

<sup>14</sup> The Board agrees that trending can be a valid appraisal technique, and can at times be the only methodology available. Reliance on a quality current cost study, however, will generally be a much better methodology than trending forward an old cost study that is known to contain errors.

<sup>15</sup> The Board believes the compounding of errors is a good reason not to trend an old number forward in future assessments.

## **VI. The Board's adjustments to the 2015 assessed value**

### **A. The assessor's use of 25% contingency was improper**

A project like TAPS includes many indirect costs, such as financing during construction, taxes, and contingency. The Board and the Courts have included indirect costs in the past in computing the replacement cost new. Although the Board generally accepts the Division's use of the Pro Plus estimate of indirect costs for the 2009-cost study, several issues require further discussion, and the contingency needed adjustment, as explained below.

Estimating contingency has been a contentious issue in these proceedings in the past, and the Board's decisions have not been consistent on this issue. However, in the 2013 decision, the Board discussed contingency at some length. The Board found that the Superior Court's acceptance of the 25% contingency in the Pro Plus studies for 2007 through 2009 was "merely the lowest percentage in an acceptable range that could have reasonably been applied to those costs."<sup>16</sup> The Board acknowledged the validity of the *Monte Carlo* approach to finding a "P-50" number, which indicates the 50% level of confidence at which it is equally likely the project would cost more or less than the estimated cost.

In the decision on the 2007 through 2009 TAPS appeals, the Superior Court explained that a standard approach to determine contingency is to find the P-50, or 50% level of confidence that the project will cost more or less than the estimated cost.<sup>17</sup> The Court noted that this sweet spot in the Pro Plus *Monte Carlo* analysis for the estimated costs for TAPS was 36% for 2007, 39% for 2008 and 37% for 2009.<sup>18</sup> The Court found that Dr. Cronshaw presented a comprehensive and well-documented analysis, supported by extensive evidence in the record, and that he followed the recommended procedures of the Association for the Advancement of Cost Engineering in developing his contingency findings.<sup>19</sup>

The Court also noted that, although Dr. Cronshaw determined that the substantially higher contingencies were appropriate, Pro Plus chose to use a 25% contingency for the 2007 – 2009

---

<sup>16</sup> See 2007-09 Decision at 110-21, ¶¶ 336-361.

<sup>17</sup> 2007-09 Decision at 110, ¶ 336.

<sup>18</sup> 2007-09 Decision at 122, ¶ 336.

<sup>19</sup> 2007-2009 Decision at 112, ¶ 341.

TAPS RCN cost studies. The decision to use 25% may have been a compromise, rather than a numbers-based decision. The Court noted that, while there was testimony that the Pro Plus Team was comfortable with the 25% contingency, Dr. Cronshaw's analysis indicated that the use of that low contingency meant there would be at least an 84% chance that the cost of the TAPS construction would exceed the Pro Plus estimate.<sup>20</sup>

For the 2013 through 2015 Pro Plus RCN estimates, Dr. Cronshaw concluded that the 25% contingency was too low because the Monte Carlo simulation predicted better than even odds that the actual costs would exceed the Pro Plus direct costs. For these years, the Pro Plus team supported using Dr. Cronshaw's contingency percentage indicated by the P-50 rate for cost study for those years. For 2013, Dr. Cronshaw concluded that Pro Plus should use 35% contingency, the P-50.<sup>21</sup> For 2014, Dr. Cronshaw concluded that Pro Plus should use 33% contingency, the P-50. For 2015, Dr. Cronshaw concluded that Pro Plus should use 32% contingency, the P-50.

The P-50 number for the 2009 Pro Plus cost study was 37%. In 2015, the Board finds based on the evidence in the record that it was improper for the assessor to apply the 25% contingency for the 2015 RCN, given the Board's findings and ruling on the issue of determining the proper contingency for the Pro Plus cost studies since 2009.

Although the P-50 calculated by Dr. Cronshaw in 2009 was 37%, the trended RCN at issue here has been adjusted, by both the Superior Court and the Assessor. Therefore, 37% is no longer the correct number to use for contingency. Based on the evidence presented at the hearing, the Board found that 32% contingency should be used for the 2015 RCN.

This adjustment results in an unadjusted corrected base cost for the 2015 TAPS RCN of \$19,822,023,193. As explained below, the Board also made an adjustment to the methodology that the Assessor used to calculate the depreciation applied to that amount to determine the final 2015 RCNLD of the TAPS.

#### **B. The Board's scaling adjustment to the 2015 valuation**

In the 2015 assessment, the Division followed the Superior Court's methodology in applying a scaling factor to account for external obsolescence. The Division used an average

---

<sup>20</sup> See 2007-2009 Decision at 110-121, ¶¶ 336-361.

<sup>21</sup> See 2013 Municipalities' Exhibit D at MUN13-002933.

throughput number for the numerator and an original TAPS design capacity number for the denominator. The resulting fraction was then scaled using an exponent of 0.45. The Board agrees that the current lowered throughput is a form of economic obsolescence. The Supreme Court affirmed that use of scaling was appropriate and should be applied to the components of the TAPS.

In calculating the numerator of the scaling factor, the Board will follow the methodology of the Superior Court and use the average daily throughput for the previous tax year as was done in past years. The average throughput to January 1 of the lien year based on the previous year is what has been used consistently by the Board. The number presented at the hearing, which the Board elected to use, was 517,000 barrels per day.

In 2013, the Board first rejected the scaling factor denominator used by the Superior Court, which was the original design capacity of TAPS, and instead used the mechanical capacity of the replacement TAPS, not augmented by the use of drag-reducing agents: that is, 760,000 barrels per day. In 2013, the Board did not differentiate between the pipeline, the pump stations, and the Valdez Marine Terminal (VMT).

In determining the denominator of the scaling factor, the Board uses design capacity of the replacement TAPS. This is the capacity not augmented by the use of drag-reducing agents. It is the actual capacity of TAPS itself, not any extra capacity that could be created by external efforts, that affects operating expenses. This is also the design capacity of both of the RCNs of TAPS that were presented to the Board in 2015.

The Board is aware that the Superior Court did not adopt this methodology in its findings on the 2007-2009 assessed values of TAPS. The Board will look to the Courts' future decisions on TAPS appeals for determining the excess capacity to be used in scaling.

The Board believes that any addition to the scaling calculation using a capacity for the pipeline or the pump stations that is higher than the mechanical capacity of the replacement TAPS would require that the RCN be similarly adjusted to reflect the added cost of building a replacement TAPS with that increased capacity. The assessed property is not the original TAPS. The pipeline or the pump stations of the current TAPS, as well as the design of the replacement TAPS in the RCN, simply do not have the throughput capacity used by the Assessor to calculate the scaling deduction. The Board believes that it is not appropriate to deduct for excess capacity that does not exist, either in the replacement pipeline design or the taxable property as it is

currently configured. The RCN is not a reproduction cost of the original system. The RCN represents a replacement cost of TAPS, not a reproduction cost of the original system and that distinction is significant in the computation of excess capacity.

The Board concluded that scaling for excess capacity in the VMT should use a higher capacity than that used for the pipeline or the pump stations. The delivery capability of the VMT is largely a function of operational logistics. The Board finds that both the existing and the assessed VMT and the RCN VMT have a capacity of at least 1.42 million barrels per day. Therefore, consistent with the Superior Court, the Board will scale the VMT using 1.42 million as the denominator, just as it did in 2014.

The Board has calculated that the scaling deductions for external obsolescence for 2015 is based upon 16.7% of the RCN cost being the VMT, which yields a deduction of \$713,272,834 for the terminal portion and 83.3% of the RCN cost being the pipelines and pump stations, which results in a deduction of \$1,550,125,383. This results in a total deduction for scaling for excess capacity of \$2,263,398,217.

## **VII. Other adjustments to the assessor's calculations were not needed**

### **A. The cost of financing during construction should be based on the cost of debt**

In 2013, both the Assessor and the Municipalities first asked the Board to measure the cost of financing by the combined cost of debt and equity. The Board recognized that the actual cost of financing construction of TAPS would include the cost for equity that an owner would contribute to the project. The Board did not agree, however, to use a weighted average cost of capital to estimate the costs of financing a replacement TAPS. The Board noted that the cost of equity and the proportion of equity that would be required in a replacement TAPS is unknown. The Board used 100% debt financing as a reasonable method for estimating the cost of financing during construction of a replacement TAPS.

Consistent with this approach, in 2014, the assessor adopted a 100% debt financing methodology, and determined that the cost of debt should be imputed at 6%. In 2014, the Board recognized that the assumption of 100% debt financing for calculating the cost of financing during construction had been accepted by the Courts reviewing the TAPS valuation appeals for estimating an RCN. This approach provides a straightforward methodology for estimating the cost of financing. In addition, assuming 100% debt financing avoids having to speculate on unknowns.

Therefore, consistent with its decisions in 2013 and 2014, the Board will not overturn the Assessor's use of the 100% debt financing for the RCN in 2015. Neither the Owners' nor the Municipalities' experts provided persuasive evidence that the Assessor's use of 4.75% for the cost of debt during construction was improper. The Board therefore affirms 4.75% as the cost of financing during construction.

#### **B. Age life depreciation calculation**

The Assessor has used the economic end-life estimate of 2068 for his age-life depreciation calculation. This estimation was based upon the Dudley Platt throughput projections for 2009. It is also based upon a minimum mechanical throughput rate of 100,000 barrels per day. The Board did not find that this estimate should be overturned by the Board based on the evidence presented on appeal.

Rather than calculating a new economic end-life base on throughput information from 2015, the Assessor simply used the 2009 end life estimate. The Court used different economic end-life dates for each year. These findings were the result of running the best available projected throughput data for each of those years forward to the year that throughput fell below 100,000 barrels per day. The Court found that TAPS could run at 100,000 barrels per day or lower, but used this as the minimum mechanical throughput of TAPS for the purpose of calculating economic end-life.

The appealing parties filed conflicting throughput projections. In 2015, the Owners did not argue that a 100,000 barrels per day low flow limit was unacceptable for use in determining the end of life of TAPS. The Owners explained that they did not know how to reach a low flow of 100,000 barrels per day, but did not argue that it was not going to be possible at some point in the future. The Owners also informed the Board that additional heat, reduction in water content, recycling of flow loops, intermittent flow, addition of chemical treatment, and blending were all being researched as methods to implement achieving 100,000 barrels per day as the future low flow rate at end of life. The Owners presented evidence that the drop below 335,000 barrels per day will require future changes in TAPS. The Board did not find the Municipalities' evidence that the end of life would be in the year 2100 based upon a low flow rate closer to 30,000 barrels per day was persuasive.

The Board finds that neither of the appealing parties met their burden to show that the



Assessor's use of the economic end life estimate of 2068 was improper.

### **C. No need to deduct additional depreciation for functional obsolescence**

Functional obsolescence applies to an element internal to the property that leads to excess operating costs, does not provide an economic return, or is obsolete because of new technology. To the extent that TAPS has functional obsolescence that is incurable, or for which the cure may occur in the future, that obsolescence is captured by the deduction for age-life depreciation, and no further deduction is necessary.

In 2013, the Board advised that “[a]n additional deduction may be allowed for the cost to remediate functional obsolescence that is curable and for which the cure is fully identified, the cost to cure is known, and the cure is scheduled to take place or already underway.”<sup>22</sup> A similar description of the allowance for functional obsolescence was affirmed by the Superior Court.<sup>23</sup> In 2014, the Division identified \$81.1 million, which the Division stated TAPS “currently is expending” to cure functionally obsolete issues.<sup>24</sup>

In 2015, the Assessor did not identify any functional obsolescence. The Municipalities supported this position. The Owners identified nearly \$2 billion in functional obsolescence that they argued should be applied to the 2015 RCN, primarily for the costs estimated to deal with low flow issues that will occur when throughput goes down to 100,000 barrels per day. Because the Owners failed to show that any of these costs met the standard set out above, it was not improper to disallow them.

## **VIII. Final assessment**

The final assessment for 2015, and the methodology for the computation, is described in the following table:

---

<sup>22</sup> 2013 Certificate at 29.  
<sup>23</sup> 2007-09 Decision at 180.  
<sup>24</sup> 2014 ICD at 21.

<b>2015 TAPS ICD ASSESSED VALUE FOR SARB</b>		
1	Superior Court TAPS RCN (2009)	\$19,137,000,000
2	Less IDC at 6%	\$17,234,329,971
3	Plus IDC at current debt rate of 4.75%	\$18,740,610,411
4	Less Land & ROW	\$18,546,610,411
5	Less Contingency	\$14,837,288,329
6	Index RCN to 2015 Price Levels (10.2%)	\$16,350,691,738
7	Correct for VSM Cost Error	\$15,299,422,311
8	Correct for effect of VSM cost error on OC, PM, AVT & IDC	\$14,878,914,540
9	Plus Add Back Contingency	\$19,640,167,193
10	Plus Add Back Land & ROW	\$19,822,023,193
11	<b>TAPS 2015 RCN</b>	<b>\$19,822,023,193</b>
12	TAPS 2015 RCN Less Land & ROW	\$19,640,167,193
13	EAL	\$11,718,994,789
14	Functional Obsolescence	\$11,690,733,176
15	External Obsolescence - VMT - 16.7.7%	
16	External Obsolescence - PIPE & PS - 83.3%	
17	Aggregate External Obsolescence - PS / PIPE / VMT	\$9,427,334,959
18	Plus: Land & ROW	\$9,609,190,959
19	<b>TAPS 2015 RCNLD:</b>	<b>\$9,609,190,960</b>

#### **IX. Board comments**

The Board recognizes that the Assessor was handicapped this year by the way appealing parties provided cost studies in the assessment process. The Board hopes that it will not be asked to review a repeat of this broken process in 2016. It is difficult for the Board to see, at this point in

time, how a 2016 assessed valuation of the TAPS based on a trended 2009 RCN would meet the standard of review set out in AS 43.56.130(f), or address the Board's concerns contained within this 2015 determination.

For the past two years, the Board has rejected that approach primarily because the Municipalities' Pro Plus Cost Team's estimates were shown to be more reliable estimates of the RCN than trending. This year the proposed changes in the 2015 RCN estimate were not well received by the Board and were not timely provided to the Division or the Owners. This year the Board made an allowance for the timing issues that the Assessor was presented with.

This deference to the Assessor's starting point is not being made lightly and is not made with intent to create a precedent. The Board's finding is that the parties did not work together well. The appealing parties did not file more reliable cost estimates in time, nor were they free from confidentiality restrictions needed to ensure that those cost studies had been vetted sufficiently, by all parties, the Assessor, the Municipalities and the Owners.

The Board's view is that, in order for assessment process to work without an enormous amount of litigation, the parties need to work with the Assessor in an open process to ensure that he has the information and the time he needs to make an accurate assessment. The Board encourages the parties to work to bring more timely, updated, and vetted cost studies to the 2016 assessment process. At a minimum, the Board believes that the Assessor should have any new RCN estimates in early January.

Depending on the extent of the changes to a cost study and the amount of access provided to the Assessor and the other party, the Board understands that the Assessor needs time to properly assess and incorporate a new cost study. However, the Board also recognizes that the Pro Plus cost studies have been continuously improved, vetted, and approved by the Board, with adjustments, every year since 2008.

The Superior Court affirmed the Board's acceptance of the Pro Plus studies as the most reliable evidence of the RCN of TAPS for the appeals of the 2007-2009 assessments. The Superior Court chose the Pro Plus cost study over the Mustang and Stantec studies in the decision on the 2006 assessment, and the Supreme Court affirmed that decision. The Board has recognized that these studies tend to become more accurate every year. The Board has also recognized increasing accuracy in the direct cost components of the Stantec studies in recent years. The direct

cost components of the RCN for the Pro Plus and Stantec studies have also been getting closer. This makes the Stantec study more useful if it is used to vet the Pro Plus study.

The parties do need to be given fair opportunity to comment on a new cost study. The Assessor should make appropriate use of any updated cost information because it is more reliable than trending old values.

**X. Conclusion**

Pursuant to AS 43.56.130(g), I, on behalf of, and as Chair of, the State Assessment Review Board, certify to the Department of Revenue, State of Alaska, that the Board has determined that the value of TAPS on January 1, 2015 has been determined to be \$9,609,190,960.

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 1st day of June, 2015.

*Signed* \_\_\_\_\_  
James I. Mosley, Chair  
State Assessment Review Board

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

## Certificate of Service

I hereby certify that on the 1<sup>st</sup> day of June, 2015, a true and correct copy of the Certificate of Determination was served on the following by e-mail and mail listed below:

Robin O. Brena/Laura Gould  
Brena, Bell & Clarkson, P.C.  
810 N St., Ste. 100  
Anchorage, AK 99501  
[rbrena@brenalaw.com](mailto:rbrena@brenalaw.com); [lgould@brenalaw.com](mailto:lgould@brenalaw.com); [ehouchen@brenalaw.com](mailto:ehouchen@brenalaw.com); [mseyay@brenalaw.com](mailto:mseyay@brenalaw.com);  
[mhodsdon@brenalaw.com](mailto:mhodsdon@brenalaw.com)

Molly Brown/Jessica Dillon  
Dillon & Findley PC  
1049 W. 5<sup>th</sup> Ave., Ste. 100  
Anchorage AK 99501  
[molly@dillonfindley.com](mailto:molly@dillonfindley.com); [lisa@dillonfindley.com](mailto:lisa@dillonfindley.com); [Jessica@dillonfindley.com](mailto:Jessica@dillonfindley.com)

Rene Broker, Borough Attorney, FNSB  
Law Department  
Administrative Center 3<sup>rd</sup> Floor  
PO Box 71267  
Fairbanks, AK 99707  
[renebroker@co.fairbanks.ak.us](mailto:renebroker@co.fairbanks.ak.us)

F. Steven Mahoney/Ryan Fitzpatrick  
Manley & Brautigam  
845 K Street  
Anchorage AK 99501  
[steve@mb-lawyers.com](mailto:steve@mb-lawyers.com); [ryan@mb-lawyers.com](mailto:ryan@mb-lawyers.com); [estelita@mb-lawyers.com](mailto:estelita@mb-lawyers.com)

Michael Garatoni  
Garatoni, Breen & Malone, Inc.  
P.O. Box 18243  
San Antonio, TX 78218  
[mgaratoni@klibre.com](mailto:mgaratoni@klibre.com)

James Seedorf  
Hughes Goski, Seedorf, Odsen & Tervoonen  
3900 C Street #1001  
Anchorage, AK 99503  
[jseedorf@hglawfirm.net](mailto:jseedorf@hglawfirm.net); [BPauli@hglawfirm.net](mailto:BPauli@hglawfirm.net)

Jim Torgerson  
Stoel Rives, LLP  
510 L St. Ste. 500  
Anchorage, AK 99501  
[jim.torgerson@stoel.com](mailto:jim.torgerson@stoel.com); [makelly@stoel.com](mailto:makelly@stoel.com)

Kenneth J. Diemer  
Dept. of Law, Oil Gas & Mining  
1031 W. 4<sup>th</sup> Ave., Ste. 200  
Anchorage AK 99501

[Ken.Diemer@alaska.gov](mailto:Ken.Diemer@alaska.gov); [Jennifer.ditcharo@alaska.gov](mailto:Jennifer.ditcharo@alaska.gov); [jessica.solnick@alaska.gov](mailto:jessica.solnick@alaska.gov)

James H. Greeley, Jr.  
Petroleum Property Tax Assessor  
550 W. 7<sup>th</sup> Ave., Ste. 500  
Anchorage AK 99501  
[James.greeley@alaska.gov](mailto:James.greeley@alaska.gov)

By: \_\_\_\_\_  
Kimberly DeMoss/Jessica Ezzell  
Office of Administrative Hearings