

BOARD ORDER: MGB 085/11

IN THE MATTER OF THE *Municipal Government Act* being Chapter M-26 of the Revised Statutes of Alberta 2000 (Act).

AND IN THE MATTER OF COMPLAINTS respecting Linear Property Assessments for the 2011 tax year filed on behalf of TransAlta Utilities Corporation.

BETWEEN:

TransAlta Utilities Corporation as represented by Wilson Laycraft LLP - Complainant

- a n d -

The Designated Linear Assessor for the Province of Alberta as represented by Brownlee LLP - Respondent

BEFORE:

Members:

J. Gilmour, Presiding Officer
L. Atkey, Member
D. Thomas, Member

Case Managers:

C. Miller Reade
D. Woolsey

The Municipal Government Board (MGB) held a hearing in the City of Calgary from Monday, November 14, 2011 to Thursday, November 24, 2011. The hearing dealt with complaints about the assessments of the Linear Property Assessment Unit Identifiers (LPAU-IDs) listed in Appendix C of this Order.

OVERVIEW

[1] The LPAU-IDs under complaint relate to Units 1, 2, 4 and 5 of the Sundance power generation facility in Parkland County. The Provincial Designated Linear Assessor (DLA) assessed these properties using a depreciated cost method established for linear property under the Act and its subordinate legislation. The parties disagree as to whether the DLA applied this regime correctly.

Units 1 and 2

[2] The Complainant shut down Units 1 and 2 in December of 2010 after receiving technical reports showing that cracks in their boiler tubes had become more extensive during the summer than was anticipated and had created unsafe operating conditions. It argues that under the circumstances, these Units were not assessable linear property; alternatively, it says they should have received extra depreciation under “Schedule D” of the “*Alberta Linear Property Assessment Minister’s Guidelines*”.

[3] In reply, the Respondent argues both Units were assessed properly. It points out that the Units were still operating as of October 31, 2010, which the Act specifies as the relevant date for the purposes of linear assessment; further, it argues that information obtained subsequent to that date is irrelevant and cannot be considered.

Units 4 and 5

[4] Units 4 and 5 recently underwent work involving both routine maintenance and an “uprate” to boost capacity. The total cost for this work amounted to over 128 million dollars.

[5] The parties disagree as to whether the Complainant reported its costs adequately as required by the Act. They also disagree about what portion of the costs should be included as assessable cost. In particular, they disagree about whether to include the cost of replacement parts as assessable, particularly when the new parts are of higher quality than the ones they replace. They also disagree about the amount of labour costs associated with such parts to include as assessable costs.

BACKGROUND

Description of the Subject Properties

[6] The Sundance Power Station is a large coal fired electrical generating facility located about 70 km west of Edmonton on the south shore of Lake Wabamun, in Parkland County. The facility was built during the late 1970s and has 6 units. Units 1 and 2 have generating capacities of 288MW each, while Units 4 and 5 have capacities of 406 MW each. Units 3 and 6, which are not under complaint in this case, have capacities of 362 MW and 401 MW respectively.

[7] To date, three of the six Sundance Units have been “uprated” to boost their capacity. Unit 6 received a 44 MW uprate in 2001, while Units 4 and 5 each received 53 MW uprates in 2007 and 2009 respectively. The work undertaken included a combination of new components, upgrades to current components, and work that would normally occur under scheduled periodic maintenance cycles. The effect of the uprates on the assessments of Units 4 and 5 is one of the main issues now before the MGB.

Regulated assessment regime for linear property and Sundance

[8] Most property in Alberta is assessed on a market value standard by municipal assessors. However, Alberta's assessment regime carves out a limited number of property types to which specialized assessment rules apply. One of these special types of property is "linear property", which section 284(1)(k) defines to mean, amongst other things, "electric power systems". Electric power system is itself defined to mean "a system intended for or used in the generation, transmission, distribution or sale of electricity" (see 284(1)(g)).

[9] Section 292 requires the assessor designated by the Minister of Municipal Affairs (the DLA) to prepare linear property assessments. These assessments must reflect the "specifications and characteristics of the linear property" as contained in the records of the Alberta Utilities Commission or the ERCB as of October 31 of the year prior to the tax year. Alternatively, they must reflect property specifications and characteristics on October 31 as contained in a report that the Assessor can request from the operator. In the current case, there were no applicable ERCB or AUC records available, so the assessment was based on information submitted by the Complainant.

[10] The valuation standards and procedures for linear property are set out mainly in a regulation called the *Alberta Linear Property Minister's Guidelines* (Guidelines), which is amended from year to year. The Guidelines establish a basic $A \times B \times C \times D$ formula for all linear property assessments, where A represents base cost, B is an assessment year modifier, C establishes depreciation by way of age life tables, and D represents an additional depreciation factor that the assessor may grant if appropriate conditions are fulfilled.

[11] The precise values for A, B, C and D are determined with reference various tables within the Guidelines, some of which are tailored specifically to individual power generation facilities - Sundance amongst them.

[12] In Sundance's case, the value for A is to be found by multiplying a cost factor found in table 1.01 of the Guidelines - not in dispute - by "included cost". "Included costs" are determined by reference to actual construction costs and another regulation called the "*Construction Cost Reporting Guide* (CCRG)". The value for D is set at 1.0 (no depreciation) unless the assessor accepts that "highly unusual site specific circumstances such as catastrophic failure" apply that were not considered by Schedule C (see Guidelines s. 2.03). Finally, values for B and C are found in tables 1.01 and 2.24.

PRELIMINARY ISSUE

[13] At the beginning of the hearing, the parties discussed certain information that the Complainant indicated contained sensitive and confidential information. In particular, the Complainant requested exhibits C4 Tab 12 and C10 Tabs 6 and 7 be sealed following the hearing. The Respondent had no objection to this arrangement. However, it noted that the report

BOARD ORDER: MGB 085/11

at C10 Tab 6 contained redacted portions and requested the report be either entered in its entirety or removed from the record altogether.

[14] The Board agreed with the Respondent that under the circumstances of this case, the entire document should be entered if it was to be entered at all, since the redacted portions might affect the interpretation of those portions available for inspection. In light of this ruling, the Complainant elected to withdraw the report at exhibit C10 Tab 6 and the Board accordingly removed it from the record and destroyed it. Exhibits C10 Tab 7 and C4 Tab 12 were ordered sealed following the hearing pursuant to section 9.3 of the MGB Procedure Guide.

ISSUES

Issue 1: Did the Complainant reply adequately to the Respondent's requests for information?

Issue 2: Should the assessments for Units 1 and 2 be reduced?

- a) Were Units 1 and 2 assessable linear property for the 2011 tax year?
- b) Should additional depreciation be applied under Schedule D?

Issue 3: What costs should be included under Schedule A for the Units 4 and 5 uprates?

- a) What costs would reflect the appropriate characteristics and specifications of the linear property given the relevant valuation standards and procedures?
- b) How should the costs of the uprate projects be allocated between assessable (included) and non assessable (excluded) costs?
- c) What allowance should be made for excluded labour costs?

Issue 4: Is the concept of effective age relevant to depreciation under Schedule C for Units 4 and 5 – and should it be used under these circumstances?

ISSUE 1: Did the Complainant reply adequately to the Respondent's requests for information?

Party Positions

[15] The Respondent said the Complainant did not report adequately to its Request for Information (RFI), as required under section 295 of the Act. While the Complainant provided some information about the Unit 4 and 5 uprates, this information lacked sufficient detail to allow a proper CCRG calculation. For example, although an 'SAP data dump' containing 11,000 cost entries was provided, it was not accompanied by a 'translation table' needed to make sense of the data.

[16] The Respondent suggested the deficiency occurred because the Complainant believed that costs it had classified as "maintenance" do not need to be reported. However, this belief is

BOARD ORDER: MGB 085/11

false. The Respondent requires reporting of all project costs so that it can determine for itself what should or should not be part of the included costs calculation under the CCRG.

[17] In reply, the Complainant argued it had made reasonable efforts to provide the information requested. It wrote to the Respondent explaining its understanding that sustaining capital expenditures are maintenance costs that are not assessable under the CCRG. The Respondent did not advise otherwise; indeed its staff advised the Complainant as follows:

We fully acknowledge that maintenance, repairs and replacement in kind are non-assessable. Information supporting that determination, whether as part of or as the total cost of the AFE, would be of value. [email from the Respondent to the Complainant, May 17, 2011, 9.39 am]

[18] Further, the Complainant stated that the Respondent's methodology did not conform to that of previous years and its directions as to what was required for the current year were unclear. The Complainant provided information including its entire SAP record as well as a power point presentation showing 23 different categories of information. It also offered to provide a design based memorandum (DBM) explaining what the project was about and its cost. In the Complainant's view, what was lacking was not the information provided, but an analysis to show what the DLA required.

Finding

[19] The Complainant made reasonable attempts to answer the Respondent's RFI.

Reasons

[20] A review of the related documents supports the Complainant's claim that it acted reasonably in answering the Respondent's RFI. The MGB reviewed the materials which the Respondent sent to the Complainant (in particular, the Read Me First, the AY RFI, the CCRG, and the Interpretative Guide). None of these advise that maintenance expenses need to be reported. Rather, these materials generally advise that an operator must report construction costs for projects. At one point, the AY RFI notes that "All electric power generation linear property is assessed based on original construction costs in accordance with the [CCRG & the Guidelines]" (page 5, emphasis added; see also page 17 lines 13-4, and 19). "Construction" is not defined for the purposes of the CCRG, but its focus is clearly on initial construction costs as opposed to costs incurred following a plant's initial set up.

[21] It is plain that the Complainant believed throughout that maintenance, repair and replacement in kind were not assessable – which is a reasonable belief given common reporting practices in the industry. As noted by the Complainant, the Respondent's own employee also said as much. The Respondent acknowledged that it knew the Complainant believed that maintenance, repairs and replacement in kind historically did not need to be reported to the

Respondent. If this belief was mistaken, clearer steps could have been taken to correct this perspective.

[22] From the series of emails that passed between the representatives of the DLA and the Complainant, it appears that the relationship between them was and remains commendably cooperative. Unfortunately, confusion resulted as a series of different approaches were considered and the parties developed different ideas about how the assessment was to be prepared and what information was needed. The Board observes that some of the calculations produced by the DLA's office in support of its proposed assessments contained errors, as the Respondent candidly acknowledged at the hearing. In addition, some of the Complainant's own enquiries did not receive effective responses – notably, its offer to provide a DBM. These circumstances no doubt helped contribute to the confusion.

[23] Clearer wording either in the CCRG or the accompanying literature (eg the Reporting Guide) to set out expected assessment and reporting procedures as well as definitions of more key terms would likely help prevent future confusion as to reporting requirements. Similarly, where a shift in practice occurs - which appears to have happened in this case following staff changes at both ends - more extensive consultation may well avoid future disputes.

[24] The MGB concludes the Complainant responded reasonably to the demands for information made upon it by providing the reports and data that it did. In sum, the Complainant did not improperly refuse to provide information requested of it during the assessment preparation process.

ISSUE 2: Should the assessments for Units 1 and 2 be reduced?

(a) Were Units 1 and 2 assessable linear property for the 2011 tax year?

Party Positions

[25] The Complainant points out that the definition of electric power system linear property in s. 284(1)(k)(i) includes “machinery and equipment” (among other things) that is owned by a person whose rates are controlled by the Alberta Utilities Commission. The regulations define exempt machinery and equipment (M&E) as devices, fittings and various other things that form “an integral part of an operational unit intended for or used in ... an electric power system ...” (s. 1(j) Alta Reg 220/2004 - MRAT). Finally, ss. 298(1)(z) and 351(1)(a) of the Act exempt M&E from assessment and taxation, unless otherwise specified in the regulations.

[26] The Complainant argues that since Units 1 and 2 were shut down in December, 2010 they did not qualify as “operational units” during the taxation year. Accordingly, they ceased to meet the definition of M&E noted above. Since the definition of linear property also incorporates M&E, the two Units also ceased to qualify as linear property. As a result, the DLA ought not to have assessed these properties – or at least ought to have granted an amended assessment under s. 305 once their change in operational status became clear.

[27] The Respondent resists this conclusion, noting that s. 292(2)(b) requires linear assessments to reflect the characteristics and specifications of linear property as of October 31 of 2010. At that time, Units 1 and 2 were still operating, and clearly qualified as systems “intended for or used in the generation, transmission, distribution or sale of electricity”, thus bringing them under ss. 284(1)(g) and 284(1)(k)(i). Furthermore, section 291(1) indicates that linear property is to be assessed whether or not it is complete or capable of being used for its intended purpose. The only exemption in that section is in relation to linear property that is under construction but not completed before October 31, unless it is already capable of being used. Since the Units were completed construction and in use as of October 31, the DLA was obliged to assess them.

Finding

[28] Units 1 and 2 meet the definition of electric generation linear property and were assessable for the 2011 tax year.

Reasons

[29] Leaving aside for the moment the question of whether Units 1 and 2 qualify as M&E, they are certainly electric power systems as defined in section 284(1)(g) since they were systems “used in the generation ... of electricity” as of October 31, 2010. They are also comprised of “structures, installations, materials, devices, fittings, apparatus, or appliances ... owned or operated by a person whose rates are controlled by the Alberta Utilities Commission”. Thus, regardless of whether Units 1 and 2 also qualify as M&E, the other items listed in the s. 284(1)(k)(i) definition are sufficient to capture them as electric power generation linear property.

[30] Further, s.291 requires all property (including linear property) to be assessed whether or not it is complete or capable of being used for its intended purpose.

[31] Admittedly, linear properties that are still under construction and not yet complete receive exemptions under s. 291(2); however, Units 1 and 2 were constructed long ago and cannot benefit from this exception. The legislative intent shown in s. 291 is that all linear property must be assessed once it is first constructed or made capable of use – even if it becomes incapable of being used later on.

[32] There is no hardship in this arrangement for at least two reasons. First, property that is no longer capable of being used may well retain value. For example, it may be repairable and capable of being used once repairs are finished. Second, as discussed later in this order, the regulated valuation standard and valuation procedures for linear property include a depreciation scheme that allows for additional depreciation where unanticipated circumstances such as catastrophic events render a linear property unexpectedly unusable. Thus, the legislative scheme

includes another more flexible tool to offset any effects of unanticipated events that impair a linear property's ability to operate.

[33] Finally, the MGB does not accept the Complainant's argument that ss. 298(1)(z) and 351(1)(a) exempt Units 1 and 2 by virtue of their having ceased to qualify as (linear) M&E in December 2010. If the Complainant is correct that their non-operating status disqualifies them as M&E under s. 1(j) of the *Matters Relating to Assessment and Taxation Regulation* (A/R 220/2004) because they are not part of an "operational unit", then exemptions applicable to M&E can be of no benefit. On the other hand, if the Units do still qualify as M&E, then they are the kind of M&E that is assessable as linear electric power systems under the Act and its regulations, including the Guidelines. Either way, they qualify as assessable linear property.

(b) Should additional depreciation be applied under Schedule D?

[34] The Guidelines establish $A \times B \times C \times D$ as the valuation formula for all linear property. $A \times B$ determines the cost to be depreciated while $C \times D$ determines total depreciation. In the case of Units 1 and 2, the parties disagree about how much depreciation should apply for the 2011 assessment year (2011 tax year). In particular, they disagree about whether the circumstances justify further depreciation under Schedule D.

Party Positions

[35] The Complainant states the automatic depreciation found in the applicable Schedule C table is insufficient for Units 1 and 2 in the circumstances of this case. It relies on reports about boiler tube samples taken in July, 2010 that - together with subsequent analysis - show the Units suffered additional impairment that created unsafe operating conditions and caused them to be shut down in December of 2010. It argues this impairment was not foreseen under Schedule C and justifies additional depreciation under schedule D.

[36] In reply, the Respondent argues that Schedule C depreciation is intended to encompass all physical, functional and economic depreciation. In its view, the impairment suffered by the plant is the kind of circumstance already contemplated by Schedule C, and does not qualify as acceptable evidence of a "highly unusual site specific circumstance such as catastrophic failure", which the Guidelines state is required for additional Schedule D depreciation. In support of this position, it points out that the Units were still operating as of the legislated condition date (October 31, 2010) and that the Complainant had known about and monitored cracks in the boiler tubes for years.

[37] The Respondent also argues that the report that confirmed the severe deterioration in the boiler tubes - and ultimately triggered the shut down - is 'post facto' information that cannot be considered, because TransAlta did not receive it until well after October 31, 2010.

[38] Finally, it argues that most components of Units 1 and 2 have already received 80% depreciation, which is the maximum possible depreciation under the tables. Additional

depreciation would take the assessed value below 20% remaining, which is contrary to the policy intent of the Guidelines.

Findings

- Unit 1 experienced 7 boiler leaks in 2008 and 2009.
- Unit 2 experienced 13 boiler failures from 2005 to 2009.
- The condition of the boiler tubes in Units 1 and 2 deteriorated unexpectedly in the summer of 2010 causing very serious impairment.
- The impairment created unsafe operating conditions that caused the Complainant to shut down Units 1 and 2 on December 16 and December 19, 2010.
- The Complainant declared Force Majeure on January 4, 2011.
- There is a significant likelihood that Units 1 and 2 will not be restarted.
- The circumstances warrant depreciation to 10% remaining (90% overall) by way of adjustment under Schedule D.

Reasons

[39] The Guidelines give the DLA discretion to apply additional depreciation to electric power systems linear property in appropriate circumstances:

2.004 (e) The assessor may allow additional depreciation (Schedule D) on a case by case basis and only if the operator provides acceptable evidence to the assessor.

[40] This section must be read in light of Section 2.003, which outlines the circumstances in which Schedule D depreciation is appropriate for electrical generation properties such as Units 1 and 2:

- (a) The Schedule C depreciation tables for ACCs beginning with GEN reflect all physical, all functional, all economic and net salvage considerations that form part of the EUB decision U97-065 supported by EUB decision U99-099.
- (b) Schedule D depreciation for ACCs beginning with GEN is only allowed for circumstances not considered in Schedule C on a case by case basis when acceptable evidence is documented and provided to the assessor. Schedule D depreciation is limited to highly unusual site-specific circumstances such as catastrophic failure.

[41] Bearing in mind the s.291 requirement for linear assessments to reflect property specifications and characteristics as of October 31, the question becomes whether the Complainant has provided acceptable evidence of “highly unusual site specific circumstances such as catastrophic failure” that existed as of October 31 2010 and that were not considered in Schedule C.

Highly unusual site specific circumstances such as catastrophic failure

[42] The Respondent suggests that the problems experienced with the boiler tubes as of October 31 could not have been “highly unusual site specific circumstances such as catastrophic failure”, because both Units were operating at normal output levels as of October 31, 2010. If there were any doubt about their operating status, the report and testimony of Sheldon Fulton - an expert witness with extensive knowledge of Alberta’s regulated energy market – shows both Units reported operating at levels near their committed capacity throughout October and November. On the other hand, it is clear that by October 31, problems with Unit 1 had developed to the point where further operation was unsafe. This circumstance was documented through a report prepared by a materials engineer with Acuren Group Inc., which analyzed tube samples taken from Unit 1 in July, 2010. Given the Units’ similarities, Unit 2 was almost certainly in a similar condition and this conclusion is consistent with subsequent testing undertaken by the Complainant.

[43] The problem with the boiler tubes was severe enough for the Complainant to shut them down within days of receiving the sample analysis, despite obligations under the Power Purchase Agreement (PPA) to provide power. Further investigation in January and February of 2011 convinced the Complainant that repair would be uneconomical – a fact confirmed by Mr. Power, who is a Certified Management Accountant and tax analyst employed by TransAlta. The testimony of Mr. Power satisfies the Board that TransAlta has no plans to repair either Unit or bring it back into operation. This intent is consistent with the Complainant’s declaration of Force Majeure and its issuance of a Notice for Destruction on February 8, 2011 under the terms of the PPA. It is also consistent with the high cost to repair, which Mr. Power estimates at \$160 million, and the lengthy estimated time to repair of approximately one year, following which recertification of the boilers would be required. In light of these circumstances, the MGB is satisfied that Units 1 and 2 are unlikely to be restarted and that their useful life has probably come to a premature end.

[44] As noted by Mr. Fulton, the buyer under the PPA has filed an objection to TransAlta’s declaration of Force Majeure and the matter is under consideration by an arbitration panel. It is thus conceivable that the panel’s decision will cause TransAlta to revisit its decision not to repair the Units. However, at this point, it must be acknowledged that the Units have been shut down, the owner has no intent to restart them, and their future operation is in serious doubt. It would be unfair to defer consideration of these factors to the following year simply because the arbitration panel has not yet rendered its decision. As noted by the Complainant, there is also nothing before the MGB to suggest that the buyer under the PPA has requested the plant to be restarted, or that the arbitration panel would be likely to order such a remedy in preference to financial compensation.

[45] In the MGB’s view, the circumstances described above qualify as “highly unusual site specific circumstances such as catastrophic failure” for the purposes of s. 2.003(b) and Schedule D depreciation. These circumstances had materially the same effect as a catastrophic failure, since they resulted in an unscheduled, lengthy and likely permanent removal from service. There

BOARD ORDER: MGB 085/11

is no doubt that they are also highly unusual, since they have resulted in unsafe operating conditions that the owner deems uneconomical to remedy. They are also clearly site specific, since they apply only to Units 1 and 2.

Not considered in Schedule C

[46] Having concluded that the circumstances qualify as “highly unusual site specific circumstances such as catastrophic failure” the MGB turns to the contentious question of whether they were considered in Schedule C.

[47] The question of what circumstances are considered by Schedule C was discussed in previous decisions MGB 117/05 (*Atco*) and MGB 039/06 (*PanCanadian*, judicially reviewed and quashed by *Pan Canadian Energy Services v. Alberta (Municipal Affairs)* 2008 ABQB 393). Those cases recognize some useful principles, such as the distinction between loss in market value and regulated depreciation under the Guidelines. However, *Atco* and *PanCanadian* focus mainly on the problem of whether Schedule D should be used to account for a loss in market value of functioning plants owing to changes in economic climate that were not foreseen by those who crafted Schedule C. In contrast, the current situation involves a physical impairment that has resulted in a lengthy and likely permanent shut down. In addition, the wording of the Guidelines has changed since those cases were decided. They now emphasize that Schedule D is available only for “highly unusual site specific circumstances such as catastrophic failure”. Thus, *Atco* and *PanCanadian* are of only limited use in the current circumstances.

[48] In his very useful and informative report, Mr. Shymanski traces the source of the Schedule C tables and reviews their connection with the Energy and Utilities Board (EUB) decisions U97065 and U99099. Mr. Shymanski appeared as a witness for the Respondent and is an engineer and member of APEGGA with considerable experience in the area of utilities rates and depreciation. A review of the EUB decisions, as expounded by Mr. Shymanski, shows the EUB tables - and the Schedule C tables based on them - use a concept of straight line depreciation over anticipated useful life. They anticipate 2020 as the terminal year of life for the Sundance units. This anticipated age life was determined after listening to testimony from depreciation experts about various factors they considered likely to result in physical, functional and economic depreciation. It is clear that the EUB also took the Complainant’s regular maintenance program into account in rejecting an argument for a shorter anticipated life owing to metal fatigue, corrosion, and other similar factors (see p. 163 Decision U97065).

[49] Mr. Shymanski sums up what is covered in Schedule C as follows:

... all causes of retirements, past and future expected, merged with management expectations have been integrated into the determination of the forecast depreciable lives and net salvage. Further, consideration for earlier than total life requirements of the generation plant has been included. For example, if there are expected or planned maintenance and/or outages for [a] generation plant that that require the replacement of facilities with new facilities, that consideration as it

relates to the determination of the final year of retirement and interim retirements has been taken into account in the determination of the depreciable lives and net salvage and are thus included in the Schedule C factors. There is also a provision for forecast negative net salvage in the Schedule C tables for all of the generation plants.

[50] The Respondent concludes that the damaged boiler tubes of Units 1 and 2 must be amongst the circumstances already considered under Schedule C. The MGB does not accept this conclusion. The current outage is not part of the owner's regular maintenance program and does not appear to have been anticipated. This is a case where the Complainant has shut down and lost the use of Units 1 and 2 for a lengthy period owing principally to an unexpected failure, event or condition that existed as of October 31, 2011. In the MGB's view, it is highly unlikely that this shut down represents the kind of "planned maintenance and/or outage" anticipated in the EUB tables or in Schedule C. It may very well represent a premature end to the useful lives of the Units. A fair assessment must take these circumstances into account, and Schedule D is designed to do just that.

Hindsight Evidence

[51] There is no dispute that the samples showing the boiler tube problem had become worse were taken prior to the legislated condition date of October 31; thus, as found earlier in this order, it is clear that serious damage to Units 1 and 2 had already happened as of October 31. The Respondent argues, however, that the reports confirming the physical condition of Units 1 and 2 are "post facto" events or information that cannot be considered. In support, it cites the common law rule that "valuation must be based on conditions as they are at the date of assessment" (*Shell Canada Limited v. the Alberta Assessment Appeal Board and County of Strathcona*, ABQB, No. 9003 22999, June 27, 1991, McCallum J.)

[52] In the MGB's view, a brief review of the governing legislation shows this argument cannot succeed. Section 292(2)(ii) admittedly requires linear assessments to reflect the specifications and characteristics of linear property as of October 31, as reflected in a report submitted in response to a Request for Information made under s. 292(3) (or in other cases the records of the Utilities Commission or ERCB). However, s. 292(4) requires submission of the report no later than December 31. This legislative regime thus contemplates an information gathering and reporting period that lasts at least until year end. In other words, the linear property owner must report information about the property's "specifications and characteristics" as of October 31 – but the information need not be gathered and reported until year end. There is therefore no bar to considering reports that became available in December 2010. The important consideration is that the reports document conditions that existed as of October 31.

[53] A complication in this case is that whereas TransAlta received the test results in mid December, 2010, it did not report them to the DLA until January 4th, 2011 - thus narrowly missing the reporting deadline established under the Act. However, in the MGB's view, this circumstance does not bar the Assessor from considering the reports. The Respondent did not

BOARD ORDER: MGB 085/11

issue the assessment until the end of January, so – from a practical point of view – the assessment officials would have had time to take the additional information into account. Indeed, in this case, the DLA continued to consider correspondence submitted well into 2011. For example, a letter dated April 15th from TransAlta to Mr. Imrie, Manager of Utilities Operations with the Linear Property Assessment Unit, shows discussions and emails concerning relief for Units 1 and 2 continued at least until March 25, 2011. This practice is salutary and not unusual. Furthermore, the DLA has discretion to issue an amended assessment at any time during the following year in order to correct an error, omission or misdescription appearing on the roll; use of this discretion may require consideration of information submitted after December 31. In view of these considerations, the MGB finds the Act did not intend the Assessor to ignore information submitted following the December 31 reporting deadline - provided the taxpayer has made reasonable efforts to report expeditiously. This provision, as far as it applies in these factual circumstances (where in particular the Complainants did provide a report before December 31, 2010), is a directory legislative provision, and not a mandatory one in the sense that no additional reporting is allowed after December 31 of the assessment year. The true mandatory provisions are the deadlines are set by section 305 to be the following year, after which no assessment can be changed, and section 491, which requires filing of a complaint over an assessment by a certain date. In this case, reasonable efforts were made, and the information was relayed a short time after its receipt.

[54] Given the evident statutory intent, it is probably unnecessary to consider further whether the rule against “hindsight” information might otherwise apply. Nevertheless, the point was argued and a few comments in this regard may be helpful. In the Board’s view, the hindsight rule would not prevent the assessor from looking at the December reports under the circumstances of this case. The reports concerned a property condition or characteristic that already existed as of October 31 and this condition was proven to exist by samples taken during prior to October 31. The information was also available to the Assessor in early January, before the assessment was prepared; this circumstance is much different from the *Prince Rupert v. Canadian Cellulose Co.* (88 DLR (3d) 662) scenario relied on by the Respondent, where the relevant circumstances were not known to the Assessor. In the Board’s view, it would be “questionable wisdom” to require the assessor to ignore the reports, and nothing would be gained by doing so. In this regard, the MGB observes parenthetically that municipal assessors (and taxpayers on appeal) often consider sales that occur between the valuation date and year end, since these can be easily considered by the assessor when he or she is preparing the assessment.

Maximum 80 % depreciation already allowed in Schedule C

[55] The Respondent’s last argument is that Schedule C depreciation has reached its maximum level under the tables, and no more depreciation may be allowed under Schedule D. The question of whether depreciation caps set under Schedule C represent total possible depreciation under both C and D was dealt with in *Daishawa-Marubeni International Ltd v. MD of Northern Lights* (MGB 109/09). In that case, the MGB found the 2007 and 2008 Machinery and Equipment Minister’s Guidelines did not restrict Schedule D depreciation where there was only 40% remaining, despite a 60% cap under the applicable Schedule C tables. Rather,

BOARD ORDER: MGB 085/11

additional depreciation could be granted even in cases where the Schedule C cap had been reached so long as the complainant provided acceptable evidence of loss that met the stated Schedule D criteria. The Board explained its conclusion as follows:

The plain reading of the Minister's Guidelines gives the assessor the authority to grant additional depreciation under Schedule D: "For any depreciation that is not reflected in Schedule C, the assessor may adjust for additional depreciation provided acceptable evidence of such loss in value exists". If Schedule D were not intended to encompass depreciation beyond 40% remaining, it could easily have said so.

There is nothing apparent in the Act or regulations that would restrict depreciation from going beyond 40% remaining, even though that is the maximum allowable under Schedule C. This interpretation appears to be backed by assessment practice in Alberta. As Mr. Shaw and Mr. d'Easum noted in their testimony, the practice of industrial plant valuation in the Province of Alberta suggests the practice in Alberta is not to restrict Schedule D depreciation if there is only 40% remaining under Schedule C. The subject property is a case on point, with an additional 10% depreciation having been granted already under Schedule D.

[56] Though not bound by its previous decisions, the MGB sees no reason to depart from the conclusions reached in *Daishawa*. It is true that the Guidelines under consideration in *Daishawa* were the M&E Minister's Guidelines where the Schedule C cap was 60% rather than 80%. It is also true that the Schedule D criteria are somewhat narrower for linear property than they are for M&E. Nevertheless, nothing turns on these differences as they relate to the ability of the assessor to grant depreciation in excess of the relevant Schedule C cap. In both cases, a plain reading of the provision suggests depreciation is possible beyond that allowed in Schedule C. Further, this discretionary power enhances the assessor's ability to redress unfairness or inequity where unanticipated circumstances cause loss beyond that anticipated in Schedule C. Thus, this ability promotes the overall objective of the regulatory scheme to achieve fair and equitable assessment. (See, for example, the duty placed on assessors by section 293 to apply the regulated valuation standards and procedures in a fair and equitable manner).

Conclusion

[57] The very unusual circumstances described above fit the provisions under the Act and regulations so as to qualify for consideration for Schedule D relief. Noting the discretionary nature of this relief, Counsel for the Complainant suggested anywhere from an additional 20% to 100% in closing argument, leaving considerable scope for choice. Taking into consideration the residual doubt that still exists as to the future of Units 1 and 2, and the fact that most of their components have already been depreciated by 80% under Schedule C, the MGB finds a Schedule D adjustment to 10% remaining (90% overall depreciation) to be appropriate in this case. In the MGB's view, this adjustment is sufficient to redress the unfairness that would otherwise result

from applying depreciation to Units 1 and 2 on a similar basis to units that do not face the unanticipated circumstances and shut down described earlier in this order.

[58] The Board observes that the common properties (designated by LPAU-IDs noted as “Common” in Appendix “C”) continues to be in operation and there was little evidence to establish a degree of redundancy sufficient to qualify the common properties for Schedule D depreciation. Accordingly, the Schedule D adjustment applies only the LPAU-IDs for Units 1 and 2, and not to common properties.

ISSUE 3: What costs should be included under Schedule A for the Units 4 and 5 uprates?

Party positions

[59] The Complainant argues that most of the costs of the Unit 4 and 5 uprates should not be “included costs” for the purposes of Schedule A. In support of this position, it points out that the work involved not only adding new parts or equipment, but also maintenance, repairs, and removing old equipment. Since the CCRG focuses on initial construction costs as included costs and specifically excludes post construction costs, maintenance costs cannot be “included costs” for the purposes of Schedule A. Similarly, the cost of replacing parts in kind should not be assessable, since this activity is much like maintenance and has no effect on the overall function of the electric power system. In this respect, many of the new parts associated with the uprates merely replaced old parts that had a similar function. The cost of this equipment should not be included.

[60] The Complainant agrees that where a new part has a similar function to the part it replaces but also operates to increase capacity, some of the cost of the new part should be included as assessable. However, it says that in such cases, the assessor may allocate the cost of the new part between assessable and non assessable amounts. In this way, the assessable portion will reflect only the incremental increase in capacity. Following this approach, the Complainant relied on a work breakdown report prepared by its engineer (the Jarvis Report) that allocates the costs of the project between new construction and repair maintenance costs. It also requested an appropriate percentage of labour costs be deducted, which it claimed amounted to a further 60% reduction of included costs.

[61] The Respondent disagreed with the Complainant’s methodology, noting that the Act requires linear assessments to reflect the “characteristics and specifications” of linear property as of October 31. In the Respondent’s view, replacing old parts with new ones of modern design and often superior quality changes the linear property’s specifications and characteristics; therefore, the cost of new parts must be always be included in the assessment.

[62] The Respondent acknowledges that the Act and CCRG do not intend minor maintenance or repair costs to be included as assessable costs, since they do not change the specifications and characteristics of the property. It also agrees that costs associated with removed parts should be deducted from the assessment. However, in the absence of original costing records, the

Respondent felt that 20% of the new cost represented a reasonable proxy for the cost of the old removed parts (to reflect the fully depreciated assessment that is here being removed). It also felt the percentage to account for interference costs and excess labour should be much smaller than the 60% requested by the Complainant.

Findings

- Relevant property specifications and characteristics must be determined by reference to the regulated valuation standards and procedures outlined in the regulations, including the Guidelines and CCRG
- The costs of “replacements in kind” are not intended to be “included costs” pursuant to the Guidelines and CCRG
- The Jarvis Report allocates an appropriate portion of equipment costs associated with the Units 4 and 5 uprates to “included costs”.

Reasons

a) What costs reflect the appropriate specifications and characteristics of the linear property given the relevant valuation standards and procedures?

Section 292(2) of the Act indicates that

Each assessment must reflect

- (a) the valuation standard set out in the regulations for linear property, and*
- (b) the specifications and characteristics of the linear property*
 - (i) as contained in the records of the Alberta Utilities Commission or the Energy Resources Conservation Board, or both, on October 31 of the year prior to the year in which a tax is imposed under Part 10 in respect of the linear property, or*
 - (ii) on October 31 of the year prior to the year in which a tax is imposed under Part 10 in respect of the linear property, as contained in the report requested by the assessor under subsection (3).*

[63] In light of section 292(2)(a) there can be no doubt that linear assessments must reflect linear properties’ “specifications and characteristics”; however, the parties disagree as to how this requirement affects included costs of electric power systems for the purposes of Schedule A. In the Respondent’s view, excluding costs incurred to replace parts would offend this requirement, because the newer parts themselves are often differently constructed and may have different technical descriptors. For its part, Complainant argued that the legislative intent is for the assessor to calculate the reproduction cost of an electric power system based on its original

BOARD ORDER: MGB 085/11

construction costs, and only add incremental costs for parts that improve the system's overall function or efficiency. Thus, in its view, the precise descriptors of a replacement part are not relevant "specifications and characteristics" of an electric power generation linear property, provided the new part plays a similar function to the old one.

[64] When interpreting legislation, it is always necessary to look not only at the plain meaning of the words involved, but also to read them in their context harmoniously with the scheme and object of the Act and the overall intent of the legislation.

[65] In this case the plain meaning of "characteristic" is something like "typical, distinctive, or indicative of character"; likewise, "specification" usually means something like a "detailed description of ... materials" (Concise Oxford Dictionary, 6th ed). However, when these words are viewed in context, it is clear that their meaning is coloured by the valuation standards and procedures that apply to various types of linear property. Section 292(2) requires assessments to reflect not only a property's "specifications and characteristics", but also the valuation standards set out in the regulations. Section 293 then adds that the assessor must follow certain "procedures" set out in the regulations. Viewed in this context, it is obvious that the "specifications and characteristics" that the assessment must reflect will depend on the relevant valuation standard and procedures fleshed out in the regulations. Since the valuation procedures vary from one type of linear property to another, specifications and characteristics that are highly relevant for one type of linear property will have no importance for another.

[66] In the case of pipelines, for example, the Guidelines set out a procedure based on typical costs per meter that are listed according to pipeline material, outside diameter, maximum operating pressure, and other similar descriptors. These descriptors, along with length, thus qualify as relevant "specifications and characteristics" for the purposes of pipeline assessment.

[67] The procedures for electric power systems, on the other hand, are much different. Here, the prescribed valuation standards and procedures make no mention of typical rates or precise material descriptors. Rather, the procedure to establish Schedule "A" involves determining the actual "included costs" of the construction of the linear property, as contemplated by the CCRG. Thus, precise material descriptors (such as those needed for pipelines) are not relevant for the purposes of electric power system assessments. Instead, the relevant specifications and characteristics are simply the actual included costs of the property (as defined in the Act) as these are measured by the directives of the Guidelines and CCRG. Relevant specifications and characteristics include any further qualities or descriptors the regulations require that the assessor to take into account when calculating included costs.

[68] In light of these observations, the MGB cannot accept the Respondent's argument that excluding costs incurred to install new parts – even big ones - must necessarily offend the requirement to reflect the "characteristics and specifications" of the property. This conclusion would only follow if the Guidelines and CCRG intend the costs of all new equipment to be added – which is the topic discussed below.

Procedures under Guidelines and CCRG

[69] “Included cost” is defined in Guidelines s. 1.001(o) as the value of linear property calculated in accordance with the CCRG prior to adjustment by the cost factor. The CCRG then describes which costs are to be included and excluded in the determination of assessable costs.

[70] The general principle of what is to be an included cost is set out in section 1.000:

The costs of construction reported by the company to the assessor are the actual expenditures made in constructing the facility as referenced in the agreement with the contractor or as incurred directly by the company.

Construction costs include both direct and indirect costs.

[71] For greater clarity, CCRG section 2.000 also describes what costs are to be excluded. Amongst excluded costs are the costs of “post-construction” activities identified as commissioning, preproduction runs and start up. While the CCRG does not state explicitly that maintenance costs are to be either excluded or included from assessable costs, it is implicit that maintenance costs are post-construction costs. Therefore, the MGB concludes that general repairs maintenance costs, considered as costs required to keep an existing plant operating as designed, are not “included costs” for the purposes of Schedule A.

[72] This conclusion is shared for the most part by the two assessors who appeared during the course of this hearing - Mr. Shaw and Mr. Imrie. Mr. Imrie is an experienced assessor with the Department of Municipal Affairs. He oversaw the preparation of the subjects’ assessments as Manager of the Utility Operations Unit. Mr. Shaw has extensive experience both as an industrial assessor with Municipal Affairs Assessment Services Branch and subsequently as a tax consultant specializing in regulated property assessment. Mr. Imrie testified that when preparing assessments, the DLA does not add the cost of repairs or maintenance to assessable costs. However, he stressed that he distinguishes between maintenance and replacement of major components, which may have higher capacities than the old components. For his part, Mr. Shaw also testified that repair and maintenance costs are not included costs for the purposes of the CCRG. In his view, such expenditures simply allow the constructed property to continue operating for its expected life and are therefore not considered assessable.

[73] A more contentious question is whether the cost of modifying or replacing large components is to be excluded under the CCRG. For the most part, the CCRG is silent on this question, since it appears oriented to greenfield construction on new sites rather than to new work integrated into pre-existing sites. However, one provision addresses modifications to existing plants – namely, section 2.300.400 which says:

Alteration costs incurred during construction that improve the operational efficiency of the original plant design, are excluded. Likewise, the costs of ‘de-

bottlenecking' or modifying an operational process are excluded if there are no changes to the equipment inventory.

Note: The cost of equipment installed to improve operational efficiency is included.

[74] Both parties agree that this provision contemplates the possibility of additional included costs when new equipment is added to a facility following its initial construction. They also agree that the cost of entirely new equipment that is installed to improve efficiency must be included (though they differ over the treatment of labour costs, as discussed later in this order).

[75] However, the parties disagree about the costs to be added when a new part of superior grade or capacity is installed to replace an old part that performs a similar function. The Respondent suggests that the entire cost of the new replacement part should be added in such circumstances, subject to certain specific CCRG reductions and an allowance to remove the cost of the old part. In support of its position, the Respondent points to the evidence of Mr. Imrie, who indicated that in his view, failure to include the cost of the new part would result in a failure to reflect the specifications and characteristics of the assessed property.

[76] The Complainant, on the other hand, argues the costs of such parts should only be included if they make a difference to the power generation facility's performance or "operational efficiency". Furthermore, it says that where there is an incremental increase in operational efficiency, the cost of the new piece of equipment should be allocated between included and excluded costs to reflect the new part's contribution to increased operational efficiency. In support of its position, it points to the evidence of Mr. Shaw, who indicated that this methodology is both simple – particularly in the absence of original costing documentation - and in line with the reproduction cost methodology apparent in the CCRG.

[77] In the Board's view, the approach advocated by the Complainant fits well with the valuation standards and procedures contemplated under the CCRG and is appropriate in this case. This finding is supported by the following four considerations.

Consistent with 2.300.400 CCRG

[78] First, the Complainant's approach is consistent with the CCRG requirements generally and with s. 2.300.400 in particular. The modification of Units 4 and 5 to increase their capacities fits the category of project described in the second sentence of s. 2.300.400, which speaks to the costs of "modifying" or "debottlenecking" projects. That provision indicates that the costs of such projects are excluded if there are no "changes in equipment inventory". In the absence of an explanatory note, this sentence might be thought to imply that replacing old equipment with new involves a change in "equipment inventory" and that such changes trigger including the cost of the replacement equipment. However, the last sentence or "note" in this provision clarifies that the equipment changes contemplated by the CCRG are "installations" of equipment designed to "improve operational efficiency". Replacements in kind – even big ones - do not

BOARD ORDER: MGB 085/11

generally affect a system's operational efficiency; therefore, the Board infers that the costs of "replacements in kind" are not intended as included costs.

[79] It is true that in some cases, parts that are essentially "replacements in kind" will do the same job better than the parts they replace - thus improving operational efficiency. In some such cases, the improvement may be very small, while in other cases the effect on operational efficiency may be much greater. With this observation in mind, the MGB finds that CCRG's intent will be satisfied in such circumstances by allocating appropriate portions of the cost of the replacement part between assessable (included) and non assessable (excluded) costs. The allocation between included and excluded costs will reflect the new part's contribution to increased operational efficiency, and thus the "specifications and characteristics" contemplated under Act when viewed in light of the regulated valuation standard and procedures.

Consistent with reproduction cost methodology

[80] Second, the Complainant's interpretation is strengthened by the observation that the Guidelines and CCRG effectively adopt a procedure based on reproduction cost, which is not affected by replacements in kind. This methodology is first apparent in section 1.000 of the CCRG. "The costs of construction reported by the company to the assessor are the actual expenditures made in constructing the facility as referenced in the agreement with the contractor or as incurred directly by the company". Reproduction cost methodology is also adopted explicitly in the Interpretive Guide, which is published by the Ministry of Municipal Affairs to help taxpayers report in accordance with the CCRG. It states at page 1:

The policies and procedures incorporated in this guide are modeled on the appraisal principle of reproduction cost, subject to divergences necessary to meet the requirements of the Alberta's assessment legislation and to provide a stable property tax base.

[81] In concluding that reproduction cost is an important principle behind the CCRG, the MGB recognizes that the Interpretive Guide is not a regulation with legislative authority (in contrast to the Guidelines and CCRG, which are regulations by virtue of s. 322(3)). However, the Guide's description of the CCRG methodology as a form of reproduction cost accurately describes the procedures apparent throughout the CCRG, which are essentially based on the costs of original equipment factored up and then depreciated to the assessment year.

Consistent with practical circumstances of industry

[82] Third, the approach also makes good sense in light of the practical circumstances surrounding the electric power generation industry where the CCRG must be applied. As noted by Mr. Power, electric power systems typically have very large repair and maintenance expenses to keep them operating safely as designed. For example, he indicated in his testimony that major turnaround projects for coal fired power plants are scheduled every 24 to 36 months and typically cost between 20 and 60 million. The reproduction cost approach described by Mr.

Shaw avoids difficulties that would otherwise be caused by the need to distinguish between the overlapping categories of repair and replacement when the intention in both cases is to keep the overall property operating as designed. It also avoids disproportionately large tax consequences for property improvements by recognizing that uprates and modernization projects for electric power generation systems often involve replacing functioning parts that are already recognized in the assessment with new parts of similar and only incrementally improved function.

Consistent with customary practice in regulated assessment

[83] Fourth, the MGB accepts Mr. Shaw's testimony that the Complainant's approach is in keeping with customary practice concerning the application of the CCRG in the context of regulated assessment in Alberta. The following portions of his report illustrate the basic principles and practices and, in the Board's view, represent a useful description of how costs are generally treated under the CCRG.

Debottleneck Projects:

...

In the assessment process, the assessor factors up the historic costs of the existing original facility using a cost escalation factor to arrive at a representation for the reproduction cost new. The reproduction cost new has already been established using the CCRG methodology when the facility was constructed and represents all of the principles set out in the CCRG;

The Assessor's reproduction cost new that comes from factoring up the historic costs would include the original labour, materials and all other direct and indirect construction costs;

As the assessor's current reproduction cost, subject to the divergences necessary to meet Alberta's assessment system, is already known, the requirement of the cost analysis is to determine what additional reproduction cost has been created by the particular project being undertaken. **In most cases the incremental increase in value would be any increased cost in replacement materials beyond what was being represented by factoring the historic cost to current levels along with any new equipment that was being installed, which would include both the direct and indirect costs associated with the new equipment installation. The labour component of the replacement material would not be considered as it is already being assessed as part of the historic factored assessment.** (Emphasis added)

...

Repairs: These types of costs are directly associated with a facility being able to operate for its expected life and are not considered assessable. Over the operational life of a facility, components fail and must be repaired in order to for the facility to be able to operate for its expected age life.

...

Replacements: These types of costs, in many cases, overlap with the repair cost category. Components of a facility can completely wear out many times over the operational life of a facility which will then require that the components be removed and replaced. This is a normal part of the operation of a facility and is built into the facilities business / operations plan for maintaining the machinery so that it can run for its expected life. Most replacements of existing equipment with new “like and kind” are considered as 100% non-assessable as they do not result in an increase of the facilities reproduction cost new and do not increase the age life of the facility.

...

Modernization of existing facilities: In many cases, a facility ages and new technology is available the modernization of some components will be undertaken ... These types of projects are very difficult to determine net assessable costs due to their nature. ... The construction cost report that is generated for projects of this type does not generally translate directly or at all in some cases into the various CCRG categories. This is due to all of the associated removal and disposal costs, the large amount of interference costs, excess engineering and construction labour costs that occur and the ability to locate and quantify what parts of the existing system has been removed and/or abandoned in place. In this case, numerous methods are used to meet the policies and procedures incorporated in the CCRG which are modeled on the appraisal principle of reproduction cost subject to the divergences necessary to meet Alberta’s assessment legislation.

New stand-alone expansions: In the case of a new standalone addition to an existing facility the CCRG process is similar in nature to what is conducted on a completely new facility. The exceptions are that there may be some interference costs ...

b) How should the costs of the uprate projects be allocated between assessable (included) and non assessable (excluded) costs?

[84] Doug Heath holds a First Class Power Engineering Certificate and is a consultant with expertise in the electrical energy sector. Mr. Heath is familiar with Units 4 and 5, having been employed by TransAlta from 1980 to 1999 in various positions, including Shift Supervisor at Sundance. Mr. Heath reviewed the components added during the uprates (as described by the Complainant’s witnesses) and in each case noted various improvements in the design of the new or replacement components that allow operation at a higher capacity. This evidence is consistent with a finding that the uprates for Units 4 and 5 involved the addition of equipment that improved operational efficiency.

BOARD ORDER: MGB 085/11

[85] Paul Jarvis is a member of APEGGA with expertise in the area of project and asset management and has considerable experience planning and executing large industrial maintenance projects. He is employed by the Complainant as a senior project manager and was responsible for the short range planning, detailed scope development, cost estimation and material purchasing for the Units 4 and 5 uprates.

[86] Mr. Jarvis explained that three types of maintenance occur at Sundance: (1) minor maintenance, repairs and replacements performed while units are running; (2) forced outage maintenance performed during short unscheduled outages to repair or replace components that break unexpectedly; (3) major maintenance performed during lengthy planned shut downs of 25 to 50 days. Major maintenance includes inspections, preventive maintenance, refurbishment or replacement of major components, and improvement projects designed to incorporate advances in technology or to make other advantageous modifications.

[87] According to Mr. Jarvis, the uprates on Units 4 and 5 were part of a major maintenance project. The “uprate” part of the project consisted of adding some completely new components, replacing some components with others of similar function but superior capacity (for example, a higher capacity turbine and higher capacity transformer to cope with the increased output) and adding more advanced diagnostic equipment.

[88] A report authored by Mr. Jarvis breaks out actual reported construction costs for seven major components of each uprate project (for example, Boiler, Turbine, Generator). The major uprate components are likewise broken down into subcomponents. For each component and subcomponent, Mr. Jarvis has allocated its cost between “major maintenance” and “uprate”. The attribution in each case reflects his opinion as to the degree to which the component was required to ensure operation at the uprated capacity. For example, components required specifically to ensure operation at uprated capacity but not previously part of the original equipment inventory receive a 100% uprate allocation. On the other hand, components that replace existing equipment but are of an improved or more efficient design receive lesser allocations to uprate (typically 50% or 25%) depending on the estimated degree of overlap and remaining life of the existing assets. Mr. Jarvis’ allocation scheme (the “Jarvis Allocation”) represents a reasonable allocation of costs and the MGB accepts his testimony as to the appropriate allocation amounts of \$27,178,007 and \$30,171,030 for the uprate attribution on Units 4 and 5 respectively. This portion of the Jarvis Allocation effectively represents the new construction on these Units beyond the pre-existing LPAU-IDs. The MGB notes that both parties accepted his total project costs of 52,161,770 for Unit 4 and 76,727,211 for Unit 5.

c) What allowance should be made for excluded labour costs?

[89] The parties have widely diverging views over appropriate amounts to remove to account for non assessable labour costs. The Respondent accepted 15% and 30% as appropriate reductions for Units 4 and 5 respectively. In support, it pointed to Mr. Imrie’s evidence that these amounts represent percentages that align with its expectations for similar projects. However, it stressed that the Complainant had not provided sufficient documentation to support

BOARD ORDER: MGB 085/11

even these amounts, and that further documentation would be required before it could recommend any greater allowance.

[90] For its part, the Complainant requested a 60% reduction from the remaining project costs to account for labour already in the original construction and other excluded costs – a figure that is supported by Mr. Shaw. It noted that the total labour associated with the project would include many forms of non assessable costs, including interference costs, the cost of disassembly, reassembly and so on. It also argued that labour costs are already included in the underlying assessment, so that adding additional labour costs for replacement parts will result in “double counting”. Finally, it noted that the costs of alteration or modification of a process are to be excluded under section 2.300.400.

[91] In the Board’s view, a further reduction of 30% is supported in this case for both Units 4 and 5. Insufficient evidence was provided to support the 60% reduction requested by the Complainant.

[92] As noted earlier in this order, the Jarvis Allocation of “non maintenance” costs effectively represents the new construction portion of the project, including both materials and labour. Section 1.000 of the CCRG classes labour costs as included costs. Therefore, the general starting position is that labour are included costs. However, as the Complainant rightly points out, a reduction is still required to account for disassembly costs, costs included in the original construction that are not associated with new construction, and certain labour costs specifically excluded under other sections of the CCRG.

[93] In this regard, Mr. Shaw said the included cost of the labour to assemble components, whatever it may be, was already included in the included cost calculation of the original 1977 & 1978 LPAU-IDs for the generators. He said the labour expense for disassembly and reassembly of a component should be removed from the included costs calculation as well, as it duplicates the cost of initial assembly of the component. On the other hand, the labour expense to assemble all new components is not part of the included cost calculations in pre-existing LPAU-IDs. As a result, the labour expense of constructing those new components should be added to the included cost for new LPAU-IDs. The MGB agrees with these statements so far. Mr. Shaw indicated that basis for his 60% reduction came from the Jarvis Report and also seemed a reasonable amount based on his previous experience.

[94] The MGB reviewed Mr. Jarvis' report, rebuttal and transcript testimony in detail and found little support for Mr. Shaw’s assertion that 60% of the labour costs were duplicated. The Jarvis Allocation was not created from a property tax assessment point of view, and accordingly does not take into account non-assessable or excluded costs from its calculations of costs attributable to the uprate. Mr. Jarvis noted that the data added to his uprate / maintenance allocation in his rebuttal, showing the total actual cost, equalled the material cost plus the cost of internal labour. However, Mr. Jarvis noted that the material cost included some other expenses, such as shipping, craning, transportation and contract labour. This distribution of materials costs was prepared for the hearing, unlike the rest of the document, but it still did not break out the

total actual labour expenses. Mr. Jarvis said it is not possible to see the breakdown of costs in all projects as contractors work at a fixed price for a whole project.

[95] In the Board's view, there simply is insufficient evidence to support the Complainant's requested 60% reduction of the total remaining project cost for duplicated or excluded labour expenses. For example, the MGB notes that Mr. Jarvis report shows material costs for the turbine in Unit 4 as \$28,345,656, as compared to total cost of \$28,849,141, leaving only \$503,485 for demonstrated labour expenses. With half of the turbine project attributed to the uprate, only about a \$250,000 out of over \$14 million allocated cost can be clearly attributed to labour expenses (nearly 2%) - assuming the 50% split was equal for materials and labour. While the MGB accepts that what the Jarvis Report labels "material costs" may include contract labour or other excluded expenses, these have not been broken out or otherwise demonstrated with any degree of clarity.

[96] Mr. Power noted that in his experience, talking to the Respondent, and talking to others in the industry, a 30% deduction from the project cost for the included cost calculation was typical. Mr. Power stated that he had grudgingly agreed to a 30% reduction for these Units and acknowledged that the Complainant did not provide a detailed breakdown of what the duplicated labour expenses actually were. Mr. Imrie said that in regards to the new component work on Unit 5, 30% of the total project costs should be removed to represent interference costs (unproductive labour, commissioning, removal of the old components) pursuant to CCRG section 2.300.500. In regards to Unit 4, Mr. Imrie expressed the view that only 15% of the total project cost should be removed to reflect interference costs. Mr. Jarvis noted that the scope of work on Units 4 and 5 was virtually identical, which is consistent with his comparable allocations for new construction costs for both projects. In light of the foregoing, the MGB finds that a 30% reduction in the new construction allocation of the project costs is an appropriate reduction for duplicated labour expenses, interference costs, and other excluded labour costs.

ISSUE 4: Is the concept of effective age relevant to depreciation under Schedule C – and should it be used under these circumstances?

Party positions

[97] The Complainant said initially that the assessment of the uprates should be given an effective age under Schedule C equivalent to the original components (late 1970s) to fully capture the depreciation that should be applied to the new construction. However, it submitted later in the hearing that if the MGB were to follow the Jarvis analysis, and remove major maintenance expenses from Units' 4 and 5 assessments, then Schedule C depreciation is no longer a significant factor. Further, it agrees with the Respondent's intent to depreciate the uprate component at an accelerated rate over the remaining life of the facilities.

[98] The Respondent said it does not use effective age to assess Sundance's various components, but rather calculates assessments based on their chronological age. A component's chronological age begins the year the component was first assessed (which is the year that it was

BOARD ORDER: MGB 085/11

built). The chronological age equals the assessment year minus the year built. Therefore, in 2010, Unit 4 (built in 2007) has a chronological age of three ($2010 - 2007 = 3$). Unit 5 (built in 2010) has a chronological age of zero ($2010 - 2010 = 0$).

Findings

[99] The uprates are new components with a chronological age beginning in the year they were installed.

Reasons

[100] The Respondent's use of chronological age is consistent with the Guidelines. Section 2.000 states:

(a) *chronological age* is the assessment year minus the year built or the assessment year minus the effective year built.

[101] Both parties agree as to the Schedule C factor to be applied to the modified base cost of the uprate projects, as well as the accelerated depreciation schedule outlined at p 28 of Exhibit R1. Under these circumstances, the MGB sees no reason for further comment.

DECISION

[102] The assessments are hereby adjusted in accordance with the following directions.

- Units 1 and 2 are to be depreciated at 10% remaining (90% overall) by way of adjustment under Schedule D.
- The uprates to Units 4 and 5 are to be assessed using included costs as shown in the following table:

Calculations of Units 4 and 5 Uprate Included Costs		
Included Cost Calculations	Uprate Unit 4	Uprate Unit 5
Project Cost	\$52,161,770.00	\$76,727,211.00
Subtract Repairs and Maintenance	-\$24,983,763.00	-\$46,556,181.00
Subtotal of Uprate Attributable Costs	\$27,178,007.00	\$30,171,030.00
Subtract 30% Labour (for historical costs in original construction and other excluded costs)	-\$8,153,402.00	-\$9,051,309.00
Total Included Cost	\$19,024,605.00	\$21,119,721.00

If the parties deem necessary, final assessment figures as calculated in accordance with the above direction may be submitted to the Board for confirmation.

No costs to either party.

Dated at the City of Edmonton, in the Province of Alberta, this 23rd day of December, 2011.

MUNICIPAL GOVERNMENT BOARD

(SGD.) D. Thomas, Member

APPENDIX "A"

APPEARANCES

NAME	CAPACITY
G. Ludwig, Esq.	Counsel for the Complainant
L. Kennedy	Witness for the Complainant
P. Jarvis	Witness for the Complainant
C. Power	Witness for the Complainant
K. Shaw	Witness for the Complainant
B. Sjølie, Esq.	Counsel for the Respondent
A. Kosak, Esq.	Counsel for the Respondent
S. Fulton	Witness for the Respondent
D. Imrie	Witness for the Respondent
D. Heath	Witness for the Respondent
B. Shymanski	Witness for the Respondent

APPENDIX "B"

DOCUMENTS RECEIVED AND CONSIDERED BY THE MGB:

NO.	ITEM
C-1	TransAlta (Paul Jarvis) Will Say Statement and Summary of Testimony
C-2	Construction Cost Reporting Document of Ryan ULC (Ken Shaw)
C-3	Depreciation Report of Gannett Fleming (Larry Kennedy)
C-4	TransAlta (Chris Power) Will Say Statement and Summary of Testimony
C-5	Brief of Complainant
C-6	Rebuttal Brief of Complainant
C-7	TransAlta (Paul Jarvis) Response to Renoir Consulting Report
C-8	Ryan ULC (Ken Shaw) Response to David Imrie, Linear Assessor Report
C-9	Gannett Fleming (Larry Kennedy) Rebuttal Evidence
C-10	TransAlta (Chris Power) Rebuttal to Report of the Linear Assessment Unit (Tab 6 documents removed at hearing)
C-11	<i>Lazin v CIBA-GEIGY Ltd, Waxman v Ontario (Racing Commission)</i> , MGB Procedure Guide (Excerpts)
C-12	Email, Subject Line: "Parkland Linear Assessment by Unit" from Chris Power
C-13	TransAlta Assessment Summary for Sundance Units 1 and 2
R-1	Report of Linear Assessment Unit, Alberta Municipal Affairs (David Imrie)
R-2	Forte Business Services Report-- Sheldon Fulton
R-3	Renoir Consulting Report on Power Purchase Agreements--Doug Heath
R-4	Barry Shymanski Regulatory Consulting Report on Depreciation
R-5	Brief of Respondent

- R-6 List of Authorities
- R-7 Volume of Charts
- R-8 Volume of Documents
- R-9 Volume of Legislation
- R-10 David Imrie's Resumé

APPENDIX "C"

Linear Property Assessment Complaints

LPAU-ID	Description	Assessment Under Complaint
7495500	Unit 4 Uprate	\$25,474,370.00
7495501	Common - Ash Rail Loading	\$119,230.00
7495504	Common - Ash Rail Loading	\$938,800.00
7495505	Unit 2 Precipitators	\$3,712,710.00
7495507	Unit 1	\$169,590.00
7495665	Units 1 & 2 Conversion	\$2,695,570.00
7495817	Unit 1	\$7,730,260.00
7495818	Common - Cooling Tower	\$6,141,700.00
7495819	Unit 1 Precipitators	\$2,998,070.00
7495992	Unit 1	\$10,400.00
7495993	Unit 2	\$33,903,150.00
7495994	Unit 2	\$170,110.00
7495995	Unit 1	\$36,736,990.00
7496357	Common - Ash Rail Loading	\$2,349,780.00
7496360	Common - Water Feeder Plant	\$5,091,910.00
7496538	Common - Units 1-6	\$436,720.00
7496690	Common - Cooling Pond	\$8,286,910.00
7496692	Unit 1	\$725,770.00
8257492	Unit 5 Uprate	\$43,746,740.00
Totals		
	Common Linear Property	\$23,365,050.00
	Units 1 & 2	\$88,852,620.00
	Unit 4 Uprate	\$25,474,370.00
	Unit 5 Uprate	\$43,746,740.00
	Total Assessment under Complaint	\$181,438,780.00