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 Alberta Power (2000) Ltd. and Milner Power Limited Partnership.

BETWEEN:

Alberta Power (2000) Ltd. and Milner Power Limited Partnership as represented by Wilson Laycraft LLP – Complainants

- and -

Designated Linear Assessor for the Province of Alberta as represented by Reynolds, Mirth, Richards & Farmer LLP – Respondent

BEFORE:

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

A. Witt, Case Manager

The Municipal Government Board (MGB) held a hearing in the City of Calgary from March 5 to 8, 2012 and March 12 to 14, 2012, and re-convened by teleconference on May 22, 2012 in the City of Edmonton. The hearing dealt with complaints about the assessments for electric power systems linear property with the Assessment Classification Codes (ACC) GEN 101, GEN 102 and GEN 111, with the Linear Property Assessment Unit Identification Numbers (LPAU IDS) listed in Appendix "D".

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I. OVERVIEW

Between 2005 and 2010, the Complainants conducted a series of work projects on two existing power plants. The parties disagree about how the costs of these projects affect the assessment of the two plants for the purposes of property tax.

Alberta's assessment regime sets out a specially regulated depreciated cost methodology to assess "electric power systems". The Respondent maintains the regulated regime contemplates adding the cost of the projects to the cost base of the assessed properties. The Complainants disagree. They say the project costs are maintenance costs that are not intended to affect base cost under the legislation.

In resolving this disagreement, the MGB was invited to examine whether (and if so how) replacing parts on older power plants affects certain specifications and characteristics, notably age, that must be taken into account when assessing electric power systems.

II. BACKGROUND

A. Description of the Subject Properties

[1] This appeal concerns the assessments of two separate coal-fired power plants. The first is the Battle River electric power generating station (Battle River), which has three power generating units: unit 3 went into service in 1969, unit 4 went into service in 1975 and unit 5 went into service in 1981. They produce 165 MW, 165 MW and 405 MW, respectively (units 1 and 2 are retired). Battle River is located in the County of Paintearth. The second power plant is the H.R. Milner electric power generating station (HR Milner). It has been in service since 1972 and produces 150 MW from a single generating unit. It is located in the Municipal District of

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Greenview. Together, HR Milner and Battle River are referred to in this order as the "Subject Properties". The issues under complaint for both Subject Properties are the same, and for this reason the parties agreed that the complaints be heard together.

B. Regulated Assessment of Linear Property and the Legislative Regime

- [2] The Act defines electric power systems linear property:
 - 284(1)(k) "linear property" means
 - (i) electric power systems, including structures, installations, materials, devices, fittings, apparatus, appliances and machinery and equipment, owned or operated by a person whose rates are controlled or set by the Alberta Utilities Commission or by a municipality or under the Small Power Research and Development Act, but not including land or buildings,
- [3] Electric Power System is also defined:
 - 284(1)(g) "electric power system" means a system intended for or used in the generation, transmission, distribution or sale of electricity;
- [4] The assessor designated by the Minister of Municipal Affairs (the Respondent) prepares linear property assessments:
 - 292(1) Assessments for linear property must be prepared by the assessor designated by the Minister.
 - (2) 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

...

- (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).
- [5] The assessments under appeal were based on information submitted by the Complainants.
- [6] Specialized rules apply to the assessment of linear property under the *Matters Relating to Assessment and Taxation Regulation*, Alta Reg 220/2004 (MRAT):
 - 8(1) The valuation standard for linear property is that calculated in accordance with the procedures referred to in subsection (2).
 - (2) In preparing an assessment for linear property, the assessor must follow the procedures set out in the Alberta Linear Property Assessment Minister's Guidelines.

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- (3) For the purposes of section 298(1)(z) of the Act, an assessment must be prepared for machinery and equipment that is part of linear property as described in section 284(1)(k) of the Act, and the assessment must reflect 100% of its value.
- [7] The valuation standards and procedures for linear property are set out mainly in a regulation called the 2010 Alberta Linear Property Assessment Minister's Guidelines, Ministerial Order No. L:268/10 (Guidelines). Sections 1.000 and 2.001 contain the following relevant definitions:
- [8] The Guidelines establish a basic A x B x C x D formula for all linear property assessments. In the case of HR Milner and Battle River, the value for A is to be found by multiplying the Subject Properties' "included cost" by a cost factor found in table 2.02 of the Guidelines. The 2005 Construction Cost Reporting Guide, Ministerial Order No. L:268/10 (CCRG) is used to calculate included costs.
- [9] The value for B is set by table 1.01 (the Assessment Year Modifier). The value for C for HR Milner (ACC Gen 111) is found in table 2.15. For Battle River units 3 & 4 (ACC Gen 101) it is table 2.05, and for Battle River unit 5 (ACC GEN 102) table 2.06 applies. The value for D is fixed at 1.0.
- [10] Some of the relevant sections of the Guidelines are reproduced below.

1.001 DEFINITIONS

In the 2010 Alberta Linear Property Assessment Minister's Guidelines

- (a) Act means the Municipal Government Act (RSA 2000 Ch. M-26);
- (b) assessment classification code (ACC) means the components of linear property as determined by the 2010 Alberta Linear Property Assessment Minister's Guidelines;
- (c) assessment year has the meaning given to it in the regulation;
- (d) assessment year modifier (AYM) means the factor that adjusts the base cost of the linear property to the assessment year cost;
- (g) **base cost** means the value resulting from the formula shown in Schedule A of the 2010 Alberta Linear Property Assessment Minister's Guidelines;
- (h) *Construction Cost Reporting Guide (CCRG)* refers to the 2005 Alberta Construction Cost Reporting Guide;
- (i) cost factor (cf) means the factor that adjusts included cost (ic) from the year built to the base cost;
- (j) *depreciation* is the Schedule C factor as determined from the 2010 Alberta Linear Property Assessment Minister's Guidelines;
- (k) *additional depreciation* is the Schedule D factor as determined from the 2010 Alberta Linear Property Assessment Minister's Guidelines;

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- (l) *electric power systems* has the meaning given to it in the Act section 284(1)(k)(i) and (i.1);
- (o) *included cost (ic)* means the value of linear property calculated in accordance with the 2005 Construction Cost Reporting Guide, prior to adjustment by the **cost factor**;
- (p) *linear property* has the meaning given to it in the *Act* section 284(1)(k);
- (v) **Regulation** means the *Matters Relating to Assessment and Taxation Regulation* (AR 220/2004), as amended;
- (y) **year built** is the year in which the linear property meets the conditions in section 291(2)(a) of the *Act*.

2.001 DEFINITIONS

In section 2.000, the following definitions apply:

- (a) *chronological age* is the assessment year minus the year built or the assessment year minus the effective year built.
- (b) *effective year built* refers to the estimated vintage of generation plant and substation components (and no other property types), based on their present condition, design features and engineering factors.
- [11] The Guidelines provide instructions on the preparation of linear property assessments:

1.002 PROCESS FOR CALCULATING LINEAR PROPERTY ASSESSMENTS

(a) Pursuant to section 8(2) of the Regulation, the process for calculating electric power systems linear property assessments is found in section 2.000 of the 2010 Alberta Linear Property Assessment Minister's Guidelines.

1.003 DESCRIPTION OF THE SCHEDULES

- (a) **Schedule** A–provides the process for determining base cost. Schedule A values are rounded to the nearest \$1 and have a minimum base cost of \$1.
- (b) **Schedule B**—lists the assessment year modifiers. Schedule B factors are specified to three significant digits.
- (c) **Schedule C**-provides the process for determining depreciation or lists the depreciation factor allowed by the 2010 Alberta Linear Property Assessment Minister's Guidelines. Schedule C factors are specified to three significant digits. **The depreciation factors prescribed in Schedule C for linear property are exhaustive except as specified in Schedule D**
- (d) **Schedule D**–provides the process for determining additional depreciation or lists the additional depreciation factor allowed by the *2010 Alberta Linear Property Assessment Minister's Guidelines*. Schedule D factors are specified to three significant digits. **The**

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additional depreciation factor for linear property described in Schedule D is exhaustive. No additional depreciation is allowed.

2.002 DESCRIPTION OF THE RATES FOR ASSESSMENT CLASSIFICATION CODES (ACCS) FOUND IN TABLE 2.01

(b) The Assessment Year Modifier (AYM) referred to in Table 2.01 is found in Table 1.01.

2.003 DEPRECIATION (SCHEDULE D FACTORS) FOR ACCS BEGINNING WITH GEN

- (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 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.

2.004 PROCESS FOR CALCULATING THE ASSESSMENT OF LINEAR PROPERTY ELECTRIC POWER SYSTEMS

The assessment of linear property electric power systems is calculated by using the following process:

- (a) Locate the ACC determined from section 2.004 in Table 2.01.
- (b) Calculate the base cost using the prescribed Schedule A formula, rounded to the nearest \$1. The minimum base cost is \$1.
- (c) Determine the Schedule B factor using the prescribed value in Table 1.01 as referred to in Table 2.01.
- (d) Determine the Schedule C factor using the prescribed value in Table 2.01A or 2.01B as referred to in Table 2.01.

C. Joint Recommendations

- [12] Prior to the hearing, the parties developed joint recommendations for the assessment of some projects and dropped a number of issues filed with the MGB. These recommendations involved:
 - Not assessing projects that the Complainants identified as 'straight repair';
 - Not assessing projects that had not been completed as of the assessment date (October 31, 2010);

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- Not assessing projects that were not linear property; and
- Assessing certain projects agreed to be new construction in the Subject Properties,
- [13] The Respondent had initially assessed all the above kinds of projects. Pursuant to the joint recommendations, only new construction projects are to be assessed. Projects that were assessed, but are jointly recommended to be removed from the assessment roll are listed in Appendix "E1".
- [14] The MGB accepts the parties' joint recommendations in regards to these projects as correct. As a consequence, the assessments of the Subject Properties will be reduced by some amount. The exact reduction depends on the MGB's decisions in regards to the remaining projects still under dispute.
- [15] The remaining projects under dispute were characterized by the Complainants' witnesses as either "replace existing" and "reconfigure or replace in kind with present day". These projects are listed in Appendix "E2" and are hereafter referred to as the 'projects in issue'.
- [16] For the projects in issue, the parties developed further joint recommendations to help resolve the complaints. The joint recommendations were presented as sets of assessment values that would be appropriate should the Board decide between one of three different scenarios:
 - To assess projects classified as "replace" and "replace in kind with present day";
 - To assess projects classified "replace in kind with present day" but not assess projects classified as "replace"; or
 - To assess neither projects classified as "replace" nor "replace in kind with present day".
- [17] This matter was complicated by the fact that some projects were agreed to be partially new. In these cases, the parties agreed that at least a percentage of the project was new. However, in these cases, the Complainants said that the rest of the project was not new, and conversely the Respondent said that the rest of the project was new as well. For the sake of simplicity, the disputed portions of these projects will be considered to be projects in issue.
- [18] It is also worth noting that until recently it was the Respondent's practice to combine all the costs of project completed in a given year, considered to be included costs for a given ACC, into the same LPAU ID. For this reason, some LPAU IDs have multiple projects. Rather than getting involved in the intricacies of identification numbers, projects are referred to in this order by Authorization for Expenditure (AFE) or Capital Expenditure Request (CER) number. The reference to relevant LPAU IDs is contained in Appendix "F", which sets out the MGB's dispositions.

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D. Procedural History

- [19] The MGB held preliminary hearings on these complaints, resulting in orders DL 012/11, DL 018/11, DL 037/11, and DL 038/11. DL 038/11 provided additional opportunities to the parties to disclose evidence prior to the hearing.
- [20] At the end of the March 14, 2012 hearing session, the parties advised the MGB that their written joint recommendations would be forthcoming. At that time, the MGB said that the hearing would remain open until it received the joint recommendations. The MGB asked for the joint recommendations to be sent by May 3, 2012. However, the parties advised that the materials sent to the MGB as of that date were not yet joint recommendations. On May 7, 2012, the MGB called a further convening of the hearing for May 22, 2012, to address the matter of the joint recommendations. The hearing was held by teleconference. By that time, the parties advised the MGB that they had resolved their differences. The joint recommendations arrived on May 25, 2012.

E. Witness Backgrounds

- [21] The Complainants presented three witnesses: Mr. Malcolm Boyd, Mr. Ken DeBlois and Mr. Cameron Hall.
- [22] Mr. Malcolm Boyd has a Ph.D. in engineering and is a member of APEGGA. He has 12 years experience in the electrical power generation industry, mostly working at Battle River. He is now its station manager, and is responsible for all budgets, including fuel, labour, maintenance, operations, and capital. Mr. Boyd was involved in some way with most of the projects at issue there.
- [23] Mr. Ken DeBlois has a degree in mechanical engineering. He has worked at HR Milner since 1993. He is now its engineering manager. His roles include business planning, working with the management team, boiler maintenance work during annual outages, and overseeing turbine maintenance and repairs. Mr. DeBlois is the author of many of the HR Milner CERs.
- [24] Mr. Hall has a mechanical engineering degree and an MBA. He has worked in the property tax consulting industry for 16 years. He is a member of APEGGA. However, he advised the MGB that he was giving testimony as a tax consultant and not as an engineer.
- [25] The Respondents presented two witnesses: Mr. Douglas Heath and Mr. Dan Driscoll.
- [26] Mr. Douglas Heath is a first class power engineer. He is presently a consultant with Renoir Consulting. His work experience includes working as a power engineer and he spent 19 years working in power plants in various capacities, including supervisory positions. He also worked for the Balancing Pool, and the Alberta Electric System Operator. Mr. Heath acknowledged that he is not a professional engineer, nor an engineering expert, nor does he design equipment, processes, nor stamp drawings.

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- [27] Mr. Dan Driscoll is a property assessment consultant and a former director of regulated assessment for the designated linear assessor. He is an accredited assessor. He last prepared linear property assessments for the Respondent in 2006. Mr. Driscoll replaces Mr. David Imrie as the Respondent's witness at this hearing. Mr. Driscoll adopted all of Mr. Imrie's filed documents, namely Mr. Imrie's filed report and his volume of charts. Mr. Driscoll became involved with the Subject Properties in late October of 2011 at the complaint stage. He was not involved in preparing the assessments, which were done by Mr. Georgeson and Ms. Therrien under the supervision of Mr. Imrie. Mr. Driscoll prepared parts of some documents presented to the MGB in this hearing that had been used by the Respondent in previous linear property assessment complaint hearings.
- [28] The Respondent also presented a report by Mr. Barry Shymanski in regards to depreciation.

III. ASSESSMENT ISSUES

- [29] There is one primary question before the MGB: Should any of the costs of the projects in issue be added to the included costs of the assessments of the Subject Properties? The Complainants argued that the projects in issue before the MGB were performed for the purposes of repairing the Subject Properties, and should not be assessed. Conversely, the Respondent emphasized that the projects in issue changed the specifications and characteristics of the Subject Properties; therefore, it said those project costs should be included as costs of construction for assessment purposes.
- [30] Given their differing perspectives, each party framed the issues somewhat differently. However, the important sub issues raised by their submissions can be set out as follows.
 - A. What is electric power systems linear property?
 - B. Is age a specification and characteristic of electric power systems linear property?
 - C. Did any of the projects at issue before the MGB change any age-related specifications and characteristics of the Subject Properties?
 - D. In the context of a pre-existing electric power system, how does one determine the specification or characteristic of included costs of subsequent power plant projects?
 - E. Of the projects at issue, which were construction activities and which were not construction activities?

SUB ISSUE A: What is electric power systems linear property?

The Complainants' Position

[31] The Complainants' presentation focused on the assessment of the Subject Properties as power plants and their characterization of the Subject Properties as electric power generation systems or facilities. The Complainants said that they didn't argue about the definition of a 'component', as the Respondent did, because 'component' does not appear in the Act.

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- [32] The Complainants encouraged the MGB to think about the projects in the context of the facilities as a whole. They emphasized that to assess facilities on the component by component basis advocated by the Respondent raises questions such as the following:
 - Is a turbine blade a discrete component of linear property, or is it one of a number of working parts of a turbine?
 - How can replacement of 1 percent of a boiler water wall constitute the replacement of a component?
 - Even if such a replacement could be considered an assessable component, how can the assessor determine the cost of 1 or 2 percent of such a wall?
 - How can one say that every component of a component, when it gets changed out, creates new linear property?
- [33] The Complainants pointed out that the assessment of all of the components, or components of components in the Subject Properties, is included in the original reproduction cost new. Further, many practical difficulties arise from assessing on this basis, such identifying and extracting historical costs of the old part and the labour costs attributable to removal. The Complainant added that until recently, the assessor did not demand this level of specificity in the information collected, so these kinds of components were not included on the roll.

The Respondent's Position

- [34] The Respondent said that the legislation intends assessment of electric power systems to proceed on a component by component level. The definition of linear property for electric power systems, in s. 284(1)(k)(i) of the Act, lists "fittings, apparatuses, devices", and so forth as part of the definition. Thus, it contemplates a component by component approach to assessment of the subject properties a conclusion supported by the evidence of Mr. Driscoll. He said that 284(1)(k)(i) is a list of components.
- [35] Mr. Driscoll said that the Act carries forward the practices found in prior legislation by assessing linear property on the component level. The *Electric Power and Pipeline Assessment Act*, RSA 1980, c. E-5, s.1(g) defined what works and transmission lines meant. Subsection (i), listed installations, structures, materials, devices, fittings, apparatuses, appliances, equipment, plant machinery, etc. Compared to the current definition (s. 284(1)(k)(i) of the Act), similar components historically were assessed under works and transmission lines. Mr. Driscoll said that even for those electric power systems assessed as machinery and equipment, under *MRAT* s. 1(1)(j) machinery and equipment means materials, devices, installations, appliances, apparatuses, tanks other than those used exclusively for storage: on the basis of this list, machinery and equipment is assessed a component level too.
- [36] In further support of the contention that electric power systems are assessed on a component level, Mr. Driscoll referred to depreciation tables. The current depreciation tables in the Guidelines look at both the age of the component and the age of the facility. As the facility becomes older and closer to its terminal life, the depreciation in the legislation is accelerated. The previous legislation (*Regulation to Prescribe Standards and Methods to be used in the*

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Making of "Works and Transmission Line" Assessment, Alta. Reg. 189/74) only looked at the age of the component in applying depreciation.

- [37] The component being assessed is one of the four specifications and characteristics of linear property (the others being age, location and cost). Specifications and characteristics are similar to what they were under the prior legislation: under the *Electric Power and Pipe Line Assessment Act*, s.9, specifications and characteristics were components, their age, their cost, and the type of generation facility they were in, either thermal or hydro.
- [38] When asked about when a component is big enough to qualify as linear property, Mr. Driscoll said that if a ratepayer thinks a project is significant enough to require an Authorization for Expenditure, then it is a significant enough project to qualify as a change in specifications and characteristics.

Decision & Reasons: What is Electric Power Systems Linear Property?

- [39] The subject properties are "electric power systems" which are defined under s. 284(1)(k)(g) of the Act.
 - (g) "electric power system" means a system intended for or used in the generation, transmission, distribution or sale of electricity;
- [40] Electric power systems are also a form of "linear property", which is subject to the special linear assessment regime pursuant to s. 292 of the Act. The applicable portion of the definition of "linear property" in s. 284(1)(k)(i) implies that such systems include various parts:
 - electric power systems, including structures, installations, materials, devices, fittings, apparatus, appliances and machinery and equipment, owned or operated by a person whose rates are controlled or set by the Alberta Utilities Commission or by a municipality or under the *Small Power Research and Development Act*, but not including land or buildings,
- [41] While it is clear that systems are made up of parts, it is the entire electric power system that is the subject of the assessment. Unfortunately, the Respondent does not explain how the term 'system' fits into its concept of assessment by component. Neither party proposed to the MGB that the word "system" used in the legislation should be defined in any way other than by its ordinary meaning. The MGB consulted a series of dictionaries on the meaning of 'system':
 - Webster's *New World Dictionary* (David B. Guralnik, ed., 2nd College Ed. (Toronto: Nelson, Foster & Scott Ltd., 1974) defines "system" as "a set or arrangement of things so related or connected as to form a unity or organic whole" (at p.1445).
 - *The Oxford English Dictionary*, (J.A. Simpson and E.S.C. Weiner, eds., 2nd Ed. Vol. XVII, Oxford: Clarendon Press, 1989) defines "system" as

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- I. An organized or connected group of objects.
- I. A set or assemblage of things connected, associated, or interdependent, so as to form a complex unity; a whole composed of parts in orderly arrangement according to some scheme or plan; rarely applied to a simple or small assemblage of things (nearly = 'group' or 'set').
- 4. In various scientific or technical uses: A group, set or aggregate of things, natural or artificial, forming a connected or complex whole. [...] b. of artificial objects or appliances arranged or organized for some special purpose, as pulleys or other pieces of mechanism, columns or other details of architecture, canals, railway lines, telegraphs, etc. (at p.496).
- Nelson Canadian Dictionary of the English Language, (Susan Green, ed. Toronto: ITP Nelson, 1997) defines "system" as "1. A group of interacting, interrelated, or interdependent elements forming a complex whole. 2. A functionally related group of elements, esp. [...] d. A group of interacting mechanical or electrical components. e. A network of structures and channels, as for communication, travel, or distribution." (at p.1384).
- The Canadian Oxford Dictionary (Katherine Barber, ed., Toronto: Oxford UP, 1998) defines "system" as: "1. A complex whole; a set of connected things, parts, institutions, etc.; an organized body of material or immaterial things. 2. A set of devices functioning together. 7. Computing a group of related hardware units or programs or both, esp. when dedicated to a single application." (at p.1472).
- [42] Key to these definitions of 'system' is the concept of a group rather than a concept of individual things. Assuming that the Respondent's characterization of the 'things' in the list in s. 284(1)(k)(i) (structures, installations, materials, etc) are components, then an electric power system is a group or set of interrelated, connected components.
- [43] Section 284(1)(k)(i) does not list specific parts of particular types of power generation systems (eg. boiler, turbine, generator). The choice to not list specific parts continues into the regulations, the Guidelines, and the CCRG. The Guidelines do refer to 'components' on several occasions in referring to "Assessment classification code (ACC)" (Guidelines, s.1.001(b)). However, in this use 'component' is a term one of general application to all types of linear property: see sections 2.002(a), 2.002(c), 2.002(d), 2.002(e), 3.000, and 4.000. The concept of 'components' in this usage is too general to provide guidance on electric power systems' assessment. It appears to be more of a byword for specifically assessed pieces of linear property. Consequently, it is clear that specific parts are not the focus of the assessment regime. Rather, the assessment of an electric power generation system comprises all of the parts required for an electric power generation system to produce power.
- [44] The Respondent's view is that s. 284(1)(k)(i) implies every part in a power system that costs some money to remove and replace should be independently assessed as a different component. Over time, to do this could require compiling a list and a cost of every single thing in every electric power system in the Province. The Respondent's approach creates in effect a parts

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inventory for every power plant and then assesses each part on that list, which would be updated each year.

- [45] The MGB does not agree that the Respondent's present approach matches the legislative intent. In the MGB's view, the object of the Act is to assess an electric power system as a whole, not to assess each individual component (or component of a component) of such a system. The legislative intent is not to go through a power plant parts list, itemizing the pieces and parts in a given electric power system in a given year. Initially the assessments may seem to be the same. The difference appears over the longer term as a system requires repairs and expired components are replaced. The Respondent would have a regime, for example, where the assessment of a particular section of pipe in a particular electric power system is potentially an assessment issue any year it is replaced. Not only is this a compulsively minute approach to linear assessment, but more importantly, there is no sanction in the legislation to assess the Subject Properties as parts inventories. (That said, there are exceptions where changes in parts have a bearing on the assessment. These are discussed in a later section of this decision.)
- [46] The Respondent argued that because the chronological age tables in the Guidelines provide a series of chronological ages, the legislative intent must have been to apply depreciation on a component basis. This is not a compelling argument as it ignores the assessor's choice to choose how to apply chronological age, which is discussed further below. It is not as simplistic as was here suggested to be.

SUB ISSUE B: Is age a specification and characteristic of linear property?

The Complainants' Position

[47] The Complainants said that year built is a specification and characteristic for new additions to an electric power system. The Complainants submit that the term 'age' is scarcely referenced in the Respondent's materials. Some examples where the year built of linear property is important are the bag house and the pulverizer, which were both added after initial construction. For such additions, the year built is material: that's where depreciation is factored from as well as the current cost. That doesn't mean that the age of every single component or part changes the specifications and characteristics of the Subject Properties.

The Respondent's Position

[48] The Respondent said that age is one of four specifications and characteristics that the assessor is to consider in preparing an assessment for electric power systems linear property. Each component is assessed according to its own age. In this case, the age of components have changed because the Complainants removed old components and put new ones in: that is a change to specifications and characteristics and must be reflected under section 292(2)(b) of the Act, which states "Each assessment must reflect ... the specifications and characteristics of the linear property".

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- [49] The age of a component is used to determine its cost factor and the applicable schedule C depreciation. The depreciation factor for a component changes depending on its age, and changing components may also change the cost of the components and the labour costs of installation. For installations in pre-existing power plants, for some of the units under appeal, it takes about 3 years for the costs of the installations to get to full depreciation.
- [50] The Respondent queried: If the assessor is only supposed to assess new linear property, then why is the assessor directed to specifications and characteristics as of October 31st each year? Why would that section even be there? Why would there just not be the definition of linear property, and section 291(2)(a) of the Act where construction is complete or under construction but capable by October 31st? Why are there multiple entries on each depreciation table, created for each of the Subject Properties separately?
- [51] Mr. Driscoll said that a linear property owner, when reporting a project, also needs to report the age of the original component removed, so that the Respondent can remove the original cost of the component removed. He said age is always listed on an AFE, making it a reliably available. However, Mr. Driscoll acknowledged that there is no place on an RFI to report the age of components removed to make way for new linear property.

Decision & Reasons: Is age a specification and characteristic of linear property?

- [52] The Respondent said that the assessment each year should reflect the specifications and characteristics of the linear property each year as of October 31, as per s. 292(2)(b) of the Act. This begs the question: what are the specifications and characteristics that the Act has in mind? The MGB considered specifications and characteristics in TransAlta. The MGB said:
 - [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.

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- [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 the assessor to take into account when calculating included costs.
- [53] In TransAlta, the specification and characteristic of 'age' was not discussed but these comments remain a reasonable explanation of the concept of specifications and characteristics contained in s. 292(2)(b). The Respondent told the MGB that pursuant to the Guidelines, age is one of the specifications and characteristics required for electric power systems linear property assessment, as it is important for the costing of and the depreciation of a component. Conversely, the Complainants said age is important for new additions to a power plant only.
- [54] The MGB reviewed the Guidelines paying specific attention to references to age-related terms in electric power systems assessment. The Guidelines provide three technical terms related to age but they are more nuanced than the Respondent suggests: these are "chronological age" "year" or "year built". Mr. Driscoll said 'year built' and age are synonyms. This statement is imprecise.
- "Year built" is defined in section 1.001 of the Guidelines:
 - (y) *year built* is the year in which the linear property meets the conditions in section 291(2)(a) of the *Act*.
- [56] Under s. 291(2)(a) of the Act, the year built is the year in which linear property is no longer under construction or becomes capable of being used for the transmission of electricity. Consequently, the year built of a piece of linear property effectively means the year that linear property was first assessed (presumably under the assessment legislation at the time of its construction). The last of the Subject Properties appears to have been finished by 1981, predating the project work at issue by many years.
- [57] Year built has two uses. First, it is used in Table 2.02 to calculate the 'cost factor' to be applied to costs expended in a particular year to bring those costs to 2005 levels. The Guidelines

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deliberately avoid any need for the Respondent to have to figure out how much an electric power system installed in 1972 would cost in 2005 dollars. The cost factor does this for the assessment.

- [58] Practically speaking it may take a few years to complete the construction of a power plant, and over that time construction costs vary. Consequently, 'year built' appears to have been historically treated as meaning the 'year a cost was incurred' (see the assessment detail sheets in C-1 and C-2) and so the cost factor is typically calculated from the year the cost was incurred.
- [59] The practice for projects creating new linear property subsequent to the initial construction of electric power systems (for example, the NOX system at HR Milner, or the mercury control system at Battle River) is to treat the year of completion of those projects as their year built even if they are years subsequent to the initial construction of the Subject Properties. The present practice is to apply depreciation in each case from the year those later additions were completed. This means upgrades or new additions are treated as brand new in the year they were installed. This practice is a convenient shorthand for calculating costs and depreciation for new installations and upgrades on long existing power plants.
- [60] However, this convenient shorthand treatment for later additions has no basis for being used in effect to re-set the age of parts in an entire electric power system, as the Respondent indicates should be the outcome of replacing various components in such a system. In this vein, the MGB notes that there appears to be one legislatively prescribed manner to assess alterations to the age of an electric power system from the year it was built. This manner is through the use of effective year built in calculating chronological age, noted below.
- [61] The second use of year built is in conjunction with chronological age. The source of the applicable Schedule C factors are Tables 2.05, 2.06 and 2.15. All refer to "chronological age". Section 2.001 of the Guidelines provides:
 - (a) *chronological age* is the assessment year minus the year built or the assessment year minus the effective year built.
- [62] No one disputes that the assessment year is 2010, being the year prior to the taxation year under MRAT section 1(1)(f). Therefore, chronological age is equal to 2010 minus either the year built or the effective year built. As mentioned before, the Subject Properties' year built dates to at least 1981 for Battle River 5, giving that unit a chronological age of 29 at the time of assessment.
- [63] The MGB heard no argument on effective year built at the hearing and the term was even omitted from the Respondent's filed report's (R-2) definition of chronological age. "Effective year built" is defined in section 2.001 of the Guidelines:
 - (b) *effective year built* refers to the estimated vintage of generation plant and substation components (and no other property types), based on their present condition, design features and engineering factors.

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- [64] There appears to be no other means in the legislation to allow for an alteration of the chronological age of an existing electric power system other than by changing its effective year built. The MGB has not been presented with any argument to this effect here.
- [65] Given that the MGB heard from the Respondent about *Nova Chemical Corporation v. Lacombe County*, MGB 002/03 [*Nova Chemical*], an MGB decision which discussed 'effective age', the MGB merely notes at this point that the Respondent did not put that decision to the MGB as an effective age decision. The Respondent put that decision before the MGB expressly as a CCRG decision. It is discussed later in this order.

SUB ISSUE C: Did any of the projects at issue before the MGB change any age-related specifications and characteristics of the Subject Properties?

The Complainants' Position

- [66] The Complainants said that the project work did not change the specifications and characteristics of the Subject Properties as per the legislation. The projects involved replacing components of components. Replacing worn, defective or cracked parts is repair and maintenance. Repairs and maintenance are not assessable. The only thing replaced in its entirety was the auxiliary boiler (a 35 year old boiler was replaced with a 20 year old boiler). A change in age of a part or component is not a change in specifications and characteristics of linear property. The age of a component is important only for new additions to a plant.
- [67] The technical changes in specifications of characteristics, as testified to by Mr. Heath, are not changes in specifications and characteristics under the legislation. Molecular differences in metal that are introduced by replacements are irrelevant to assessment.
- [68] The Complainants said that the work before the MGB has not affected year built. The Complainants commented,

when you send your generator off to have the copper all pulled out, find the crack, have that repaired, and then rewound -- then rewind with the same old copper? What does that do to the year built? It does nothing.

- [69] Similarly, they said changing 50 to 60 elbows in fifteen miles of piping does nothing to year built. Further, replacing 1% of the water wall does nothing to the year built of the boiler. The Complainants concluded that there is no effect on year built when work simply changes components of components to keep them running. The Complainants said that year built might change if one puts in an entire turbine, but none of the work that went on here was anywhere near that magnitude.
- [70] Year built is tied into the notion of life extension. This was the case in the *Nova Chemical* decision. This would occur if one were effectively changing the entire age of something by the nature of a project, which is another thing. Changing out components in major maintenance is not going to affect the year built.

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- [71] The Complainants also said the fact that AFEs were created, or when a so-called 'construction crew' came to the plant are also irrelevant. There is also sometimes a significant amount of work required just to make a replacement.
- [72] The Complainants said that apart from the projects that they acknowledged create new or partially new linear property, pursuant to the joint recommendations, none of the projects changed the specifications and characteristics of the Subject Properties.

The Respondent's Position

- [73] The Respondent said that all of the projects changed the specifications and characteristics of the Subject Properties, and should be assessed. As a plant continues to age, more and more replacements are required. These replacements were necessary for the Subject Properties to continue to operate. There's no dispute between Mr. Boyd, Mr. DeBlois and Mr. Heath; all of these projects under dispute are replacements. The Respondent said that all replacements of components are considered new for the purposes of the legislation.
- [74] The effect of removing old components and replacing them with new ones becomes more and more significant as the Subject Properties age. Replacements or upgrades of components have a greater effect on the overall age and physical life of a power plant. As the Subject Properties continue to age, one would expect to see more and more upgrades and replacements. This is what happens with older facilities like those under complaint. Mr. Driscoll said that what Mr. Heath described as a change to technical specifications matched up with the Respondent's interpretation of specifications and characteristics when it came to replacing a component.

Decision & Reasons: Did any of the projects at issue before the MGB change any agerelated specifications and characteristics of the Subject Properties?

- [75] The Complainants and the Respondent disagree on whether the projects at issue changed the Subject Properties' specifications and characteristics. Based on the assessment of the Subject Properties as systems and based on the Guidelines' specifications and characteristics of chronological age, the test of whether an electric power systems' chronological age has changed appears to be 'does the project affect the estimated vintage of the electric power system, keeping in mind present condition, design features and engineering factors?' (s. 2001(b)). Another way of phrasing this question could be to ask 'Did the work make the Subject Properties any younger?' The answer is no. The Complainants' Engineers convinced the MGB that the work performed was done to allow the Subject Properties to reach the end of their designed life span. Keeping old power plants working is not the same as making them younger. The work did not change the chronological age of the Subject Properties. There is no reason therefore to proceed any further and consider the magnitude of the change, as there was none.
- [76] The Respondent put 'age' into issue but did not show that the chronological age of the Subject Properties changed by the project work. The Respondent presumed that replacement projects create new linear property with an age of zero. It is not enough to say that because

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something has been replaced, therefore the Subject Properties' specifications and characteristics are different. One should also be able to explain how they have changed in assessment terms.

- [77] The MGB heard that technical changes in specifications of characteristics matches up with the Respondent's understanding of changes in specifications and characteristics. The Respondent did not point the MGB to where the legislation references "technical specifications". Some elaboration would have been interesting, but it wasn't presented to the MGB. As it stands, the MGB cannot see how some difference in the kind technical specifications spoken to by Mr. Heath is contemplated by the Act as a change to specifications and characteristics, aged-related or otherwise. The only project that changed the specifications and characteristics of the Subject Properties was Project 196, discussed later in this order.
- [78] An additional project is worth noting in passing. HR Milner Projects 1303-1304 involved the replacement of the 1972 auxiliary boiler with a 1990 model, and appeared to be a significant replacement project. The replacement boiler was about 20 years old at the time of assessment. However, under table 2.15 of the Guidelines (the applicable table for the HR Milner facility), all chronological ages above seven years are depreciated by 80%. Therefore, both a 35 year old boiler and a 20 year old boiler will be depreciated by 80%, so whatever effect the boiler would have on that electric power system would not be treated differently by way of depreciation. The reproduction cost methodology of the CCRG already takes an "almost identical" auxiliary boiler into account, so the costs added and removed (when cost-factor adjusted) should be a wash.

SUB ISSUE D: In the context of a pre-existing electric power system, how does one determine the specification and characteristic of included costs of subsequent power plant projects?

The Complainants' Position

- [79] The Complainants said projects that repair and maintain the Subject Properties are not assessable and no costs are to be included in respect of these projects. The Complainants said that TransAlta is an instructive decision. If work is not life extending or facility bettering, then the cost of that work is not assessable. Conversely, it is fair to assess upgrades in function, output or capacity. TransAlta instructs the assessor to allocate between uprate work and maintenance work. In that case, much of the uprate was allocated as major maintenance. The Complainants asked the MGB to follow the decision in TransAlta.
- [80] Mr. Hall said the fundamental issue before the MGB is whether maintenance, repair and replacement work expenses should be included in power generation assessments. The Complainants believe the answer to be no.
- [81] Mr. Hall provided the following opinions on practical maintenance requirements in the Subject Properties:

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- a. Maintenance does not create value for linear property. It allows a plant owner to continue to operate the plant throughout its normal life. You cannot run a plant for 30 years without fixing things. Without maintenance, the plant would stop operating.
- b. Replacement is often the least expensive form of maintenance it's easier to replace a part than to try to fix it. Often, the replacement is a small part that isn't working in a larger system. Sometimes a replacement removes an older part with a present-day part with different capability, but using the present-day part is the most cost effective replacement.
- c. The importance of a part is what it does. If you are replacing an old part with a modern off the shelf part to achieve the same functional outcome, then there is no added value.
- d. There are many things in a power generation facility that are wear items. People in the plant would refer to them as consumables. Many of these things are small pieces of larger equipment. The original construction cost of the entire facility includes these things when they were new and in good working order.
- e. Sometimes the Complainants have to address a design efficiency, such as a pipe built without sufficient support, or other problems in the boiler.
- [82] The Complainants said that the assessment system under the CCRG is based on the creation of new linear property. The Complainants said the interpretative guide to the CCRG is instructive in determining the CCRG's purpose. It says

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

[83] The International Association of Assessing Officers (IAAO) definition of 'Reproduction Cost New' is:

[t]he cost of constructing a new property, reasonably identical (having the same characteristic) with the given property except for the absence of physical depreciation, using the same materials, construction standards, design, and quality of workmanship, computed on the basis of prevailing prices and on the assumption of normal competency and normal conditions.

- [84] The term 'Cost' is "[g]enerally used in appraisal to mean the expenditures direct and indirect [overhead] of constructing an improvement" [IAAO Glossary for Property Appraisal and Assessment, page 34]. The Complainants said that post-construction costs, such as repair, are not assessable under the CCRG.
- [85] In particular, Mr. Hall explained that, in the Complainants' view:

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- Studies are not assessable under 2.100.100 of the CCRG;
- Incomplete or not started work is not assessable;
- Some property is non-linear property (personal property, spare parts, buildings and structures) and not assessable under 2.300.300 of the CCRG;
- Repairs without replacements are not assessable, being post-construction activities under 2.200 of the CCRG;
- Repair with replacement necessary for life achievement is not assessable;
- Work addressing design deficiencies is excluded by section 2.300.400 of the CCRG.
- New improvements are assessable, less interference costs; and
- Schedule C of the Guidelines takes account of all changes in condition.
- [86] The Complainants say assessing repair expenses is impractical. If maintenance expenses were to be assessed, thousands of items would be on the roll. If the original included costs reflect reproduction cost of the component when it was new, why complicate the assessment by taking out the old value, putting in a new value, and then trying by some manner to reduce the new value for labour costs? This procedure is unnecessarily complicated. The original part was already assessed when it was new. This assessment practice was never a part of the intended practice of assessing such linear property.
- [87] The Complainants argued that income tax cases may be instructive on tests to use in looking at the expenditure of money and determining whether that money was spent on maintenance or betterment projects. The question of whether the work materially improved the property beyond its original state is relevant to the issue before the MGB. At the hearing, the Complainants mentioned two cases in particular, cited in *Marklib Investments II-A Limited (Appellant) v. Her Majesty the Queen (Respondent)*, (1999) 2000 DTC 1413 (TCC):
- o Canada Steamship Lines v. MNR, 66 DTC 5205 (Ex. Ct.): An expenditure for the purpose of repairing the physical effects of use such as an asset in the business whether resulting from wear and tear or accident is not an outlay of capital. It is a current expense.
- o Gold Bar Developments Ltd. v. M.N.R., (1987) 87 DTC 5152 (FC): if a taxpayer is forced to make a repair, the taxpayer doesn't have to ignore advancements in technology in carrying out repairs. Using modern technology in carrying out repair work is still repair work.
- [88] The Complainants argued that Respondent's current policies have no basis in historical practice. Once, the Respondent asked for reporting of additions and deletions from power plants. Now, it asks for reporting of all work performed. The Complainants indicated that the Respondent's approach was influenced by international financial reporting standards. Mr. Hall said that the Respondent's agents said they were going to assess everything in compliance with IFRS (International Financing Reporting Standards) guidelines, not specifications and characteristics. The Complainants said the accounting practice of capitalizing costs does not make costs assessable for linear property purposes.

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- [89] Mr. Hall said that the Complainants are also concerned about double assessment on the Subject Properties. Double assessment is where new costs are added to the roll for replacement components, but not removed from the roll are the costs of the components that were retired. The value from the original cost that does not disappear even if the part it represents has been removed.
- [90] The Complainants said the *Nova Chemical* decision had no application to the subject appeals. The decision to include replacement costs in that decision was premised on a finding that the replacements impacted the effective age of the plant, which is not the case here. Further, as the Respondent has often argued in other contexts, concepts from the M&E assessment regime do not necessarily apply to linear property assessment. Linear and M&E have different assessment regimes, with different schedules, aging and depreciation. In this case, the properties are not comparable, since power plants experience much higher levels of wear and tear than M&E plants.

The Respondent's Position

- [91] The Respondent said that the Complainants were unclear on identifying the section of the legislation that allows for project work expenditures to be excluded from the assessment. The Respondent's key submissions were that:
 - Changes to specifications and characteristics to linear property are to be assessed each year;
 - The CCRG alone doesn't determine if yearly project work is to be assessed. That is determined by the legislation as a whole;
 - Schedule "C" does not determine if yearly project work to be assessed;
 - The Respondent has not changed its policy over the years.
- [92] The Respondent clarified that the CCRG alone doesn't determine if yearly project work is to be assessed. That is determined by the legislation as a whole. Using the CCRG to exclude annual project work that changes the specifications and characteristics of linear property overrules the legislated directions to assess specifications and characteristics as they exist as of October 31 in the assessment year. Also, the true reproduction cost of the Subject Properties is not the actual cost of construction modified by the CCRG.
- [93] The Respondent presented the *Nova Chemical* decision as being one of the few CCRG decisions in existence. The Respondent said that the arguments in *Nova Chemical* are familiar: the property owner said the replacement of a part of an existing improvement does not add value; the replacements were new like components; plant capacity was not affected and there was no effect on expected life. Since the effect of replacing components becomes more significant as the plant ages, replacements or upgrades of components have a greater effect on the overall age and physical life of the plant. This effect happens to older facilities like the Subject Properties. The included costs of the replacements should be included as in *Nova Chemical*.

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- [94] The Respondent clarified that in *Nova Chemical* effective aging is done in the machinery and equipment world because their Schedule C table does not address the age of component and age of plant together as electric power systems assessment does. *Nova Chemical* was put to the MGB not as an effective aging case, but as a CCRG case.
- [95] The Respondent said that included costs have been deducted from the assessments in respect to the cost of components that have been removed from the Subject Properties. Components which retire early will be removed from the assessment. From an assessment perspective, Mr. Driscoll said that when new work is done, the included cost of the old work comes out. For example, when turbine parts are replaced, the assessor went back to the original turbine assessment and removed the included costs for that turbine component from the year that the predecessor component was first installed. Mr. Driscoll said that for this reason, the assessment roll changes every few years. The old, removed parts will not show up on the assessment roll after they are removed. Figuring out which projects require removing values from which previous years' included costs (from the year of the replaced parts' original installation) requires consultation with property owners, who kept AFE information in their records.
- [96] Mr. Driscoll said the Respondent has not changed its assessment policies over the years. The Respondent's practice has always been to ask ratepayers whether there have been any additions, deletions or changes to power plants. Mr. Driscoll acknowledged that the Respondent has become more diligent about doing its job and asks for more documentation, but is not putting any more on the roll than it historically has. The one change in practice that Mr. Driscoll identified was that the Respondent no longer combines all projects in one year into a single LPAU ID. The Respondent now gives each project its own LPAU ID, to make each more identifiable in the future. The Respondent said there is no assessment testimony contrary to Mr. Driscoll's testimony. Therefore there is no evidence that there has been a change as to how assessments have been done.
- [97] Mr. Driscoll presented the MGB with the assessment roll for the Subject Properties in the 1999 tax year. The documents provided were a subset of documents in ATCO Power assessment records particular to Battle River and HR Milner. Mr. Driscoll showed the MGB how the assessment of various projects on Battle River had been added since the plant's construction, in particular in regards to communication equipment and equipment shared among the five generating units then existing.
- [98] Mr. Driscoll said that the 1999 assessments show a 'point in time' assessment and do not, like the 2010 assessment, reveal the components that were removed from the plant at any time before or after 1999. These documents were intended to show that components come in and go out over time, which happens all the time with generating facilities.
- [99] When asked about this document, and why the five included costs for assessment on Battle River unit 5, totaling \$140,082,251 from 1978 to 1982 have not changed at all by 1999 (showing a total yearly deletion of 0 for each of the five years), or even 2010 (as these five figures with the \$140M total all appear on the 2010 assessment roll), Mr. Driscoll opined that

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there were no changes to the components which those included costs represented. However, when questioned further, Mr. Driscoll acknowledged that he could not say why none of these amounts had changed. He hypothesized that many of the parts were originals, and would not have been removed by 2010.

[100] In further response to the Complainants' arguments, the Respondent said that Schedule "C" does not determine if yearly project work to be assessed. The Respondent indicated that the Complainants did not correctly appreciate the intent of depreciation. The Respondent said that Schedule C should be applied based on the year a component was installed, and newly installed components in old plants should not be eligible for maximum depreciation. Schedule C depreciation tables are designed to depreciate new components in an older facility by taking into consideration the age of the component and the age of a facility, therefore accelerating depreciation. Therefore, newer components are supposed to get different depreciation and they depreciate faster in older plants. The same conclusions may be drawn from Mr. Shymanski's filed report. New components and the old components will both depreciated toward the terminal end date of the facilities, but new components depreciate relatively faster.

[101] Contrary to the Complainants' suggestions, the Respondent said that income tax arguments are not relevant to linear property assessment. The income tax cases presented by the Complainants were decided under a different regime and are inapplicable. Instead, the MGB should focus on the legislation under the Act; the terms 'capital' and 'maintenance' are not relevant to the CCRG.

Decision & Reasons: In the context of a pre-existing electric power system, how does one determine the specification or characteristic of included costs of subsequent power plant projects?

[102] Firstly, it is important to remember that linear property assessment exists for property tax purposes, under property tax legislation. Linear property assessment is not meant as an annual accounting exercise. Linear property is assessed according to the valuation standard in the regulations (under section 292(2) of the Act) and that standard is prescribed by the Guidelines (under section 8 of MRAT). Under section 1.001(o) of the Guidelines,

included cost (ic) means the value of linear property calculated in accordance with the 2005 Construction Cost Reporting Guide, prior to adjustment by the cost factor.

[103] Thus, when determining whether a cost should be added to an assessment, one must turn to the CCRG to determine if the cost was incurred as an assessable construction cost. The CCRG begins by indicating that the costs of construction of the actual facility are to be included costs. Section 1.000 says:

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1.000 COSTS TO BE INCLUDED IN DETERMINING ASSESSABLE COSTS

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.

[104] The term 'facility' is not defined in the CCRG, which is intended to be used for both linear property and machinery and equipment assessment (see also M&E Guidelines s. 2001). Facility, as a stand-alone term, is also not defined in the Guidelines, the Act, or even the *Electric Utilities Act*, SA 2003, c E-5.1 (although section 1(1)(u) of that act lists 'facilities' associated with a generating unit). From a review of where the term 'facility' is used in the Guidelines in the power generation context, the term appears to refer to generation or co-generation systems. For example, while many power plants are specifically named in Table 2.01 of the Guidelines, some catch-all categories refer to power plants as facilities: GEN 200, 201 and 300-2. Given this background, the CCRG's reference to 'facilities', in the context of power generation assessment, can be understood to mean 'electric power systems'.

[105] 'Construction' in the CCRG clearly addresses the initial assembly and installation of an electric power generation system. It is fair to presume that when the Subject Properties were built, its builders built an electric power system with new parts, as opposed to the old, worn, decayed, or obsolete parts that Mr. Heath pointed out had been replaced by the projects at issue. Therefore, the included costs of the Subject Properties reflected new facilities. Construction, the parties have also agreed, includes later additions to electric power systems that were not there before. One such example is the new mercury control systems at Battle River. The costs of these projects are included when the project installations are new.

[106] Section 1.000 refers to 'actual expenditures made in constructing' and the reader should be careful to not confuse these with generic AFEs (Authorizations For Expenditures) or CERs (Capital Expenditure Requests) that are required when power corporations spend money: the materials before the MGB show that AFEs may be prepared even for conducting studies (see for example Projects 1293, 70926, 72082, 72093, and 73027). It appears that when the Complainants' employees want to spend some of its money, they need corporate permission, and these permissions are requested in the form of an AFE or CER.

[107] It is also relevant to note that section 1.000 does not refer to a change of any sort or shut downs. The CCRG does not explicitly refer to any work that happens after the initial construction of a system. It also pays little attention to who does the work – either externally (a contractor) or internally (the property owner) so long as the cost of that work is recorded.

[108] Conversely, the CCRG says that not every expenditure is a construction cost:

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2.000 COSTS TO BE EXCLUDED IN DETERMINING ASSESSABLE COSTS

The following costs are to be excluded when determining assessable cost. This listing is not intended to be exhaustive.

Not all construction costs associated with a project are included in determining assessable cost. A project cost may be excluded from assessable cost for one or more of the following reasons:

- it is the cost of a pre-construction activity,
- it is the cost of a post-construction activity,
- it is associated with a component of the project which is not defined as property in the Act, and/or
- it is associated with property which is made exempt from assessment in the Act.

It may be necessary for the assessor to meet with the company representative to determine the status of specific costs and to understand accepted industrial policies and practices.

[109] The classification of an activity, including a post-construction activity, is to be based on accepted industrial policies and practices. The CCRG also elaborates on what constitutes post-construction activities:

2.200 POST-CONSTRUCTION ACTIVITIES

2.200.100 COMMISSIONING, PRE-PRODUCTION RUNS, AND START UP

The costs associated with the following activities occur after the physical completion of construction and are excluded:

Commissioning: the analysis and verification of operational processing or manufacturing systems.

Pre-production run: pre-operational run of the process allowing for adjustments, revisions, etc., that produce product to specification.

Start up: a run that produces on-specification product at design quantities within warranty provisions.

Note: The costs of equipment installed during, or as a result of, commissioning, preproduction, and start up runs are included.

[110] Notably, the CCRG makes no mention of maintenance, repair or work required to attain life achievement. However, considering the kinds of activities described in section 2.200, it is implicit that the CCRG was drafted with immediate post-construction considerations in mind.

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The activities described in this section are those activities that appear to be performed for calibrating and testing and the use of a brand new plant. It is equally obvious from an ordinary reading of this section that it was not drafted with activities on decades-old facilities in mind.

- [111] The MGB notes that this reading is consistent with the TransAlta decision. There, the MGB found that replacements in kind do not affect an electric power system's operational efficiency. Therefore, the costs of replacement in kind projects are not intended as included costs pursuant to section 2.300.400 (TransAlta at para. 78). The exception is that the costs of replacements in kind which improve operational efficiency should be allocated between included and excluded costs to reflect the cost of the new part's contribution to increased operational efficiency on one hand and overlap with the value of existing assets on the other (TransAlta at paras. 79 and 88).
- [112] If outage or maintenance work were considered construction activities, if a major outage fell over October 31 in a given year, it could well follow the plant would be 'under construction' and incapable of being used at the assessment date. It would be thereby exempt from assessment under section 291 of the Act. There is no anti-avoidance provision in municipal property tax law. This legislation should be interpreted in a way that does not allow the section 291(2) to turn into an avoidance provision.
- [113] The MGB considered the CCRG's object of capturing reproduction cost in TransAlta, at paras. 80-81, which says in part: "the Guidelines and CCRG effectively adopt a procedure based on reproduction cost, which is not affected by replacements in kind." The CCRG provides instructions on the calculation of the reproduction of a new electric power system's cost of construction because it tries to capture the cost of the constructing the electric power system as a piece of property, and nothing else. The question then in assessing projects on long existing power plant is simply whether the activity added to that electric power systems property, or not.
- [114] It is also counter intuitive that as a power plant ages, and its maintenance costs increase, that somehow as a result of increased maintenance costs the plant could be worth more. The Respondent's approach to including costs of replacement projects has the effect of increasing the value of aging plants that cost more to maintain. Therefore, in this context, activities can be classed as construction activities or not construction activities.
- [115] The Respondent brought the *Nova Chemical* decision to the MGB's attention as a CCRG case. It appears that costs were included under the CCRG in *Nova Chemical*, because the projects there at issue changed the effective age of the plant. None of the evidence before the MGB supports a similar finding in respect of the Subject Properties. *Nova Chemical* is a short decision involving a different genre of assessed property. In the circumstances of that case, it may have been appropriate to include the costs of replacement parts but it is not appropriate here.
- [116] Before moving on from this issue, the Respondent had argued that it was its historical practice to add and delete items from assessment rolls when components were replaced. However, a comparison of documents produced by Mr. Driscoll, dating to 1999, contrasted with

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the assessment documents from the tax year under appeal, appear to indicate this is not the case. In particular, the MGB directed Mr. Driscoll to the 1999 included costs he produced for Battle River Unit 5. The MGB pointed out to Mr. Driscoll that for this generating unit, none of the 1999 included costs (some \$140 million) had been removed from the roll by 2010. Mr. Driscoll opined that perhaps nothing has been removed from the plant in these years.

[117] His explanation is unsatisfactory: the parties had already spoken to approximately two dozen acknowledged replacements that related specifically to Battle River Unit 5. Indeed the assertion that these projects were replacements is the very crux of the Respondent's argument. If these included costs did not change from 1999 to 2010, as shown on the face of these documents, then obviously nothing was removed from the roll all the while included costs of the replacement projects performed in that time were added to it. Additionally, twenty three of twenty four entries wholly on the roll for Battle River Units 3 & 4 in 1999 were still on the 2010 roll. While ancillary facilities (such as 'comm.' and 'main' equipment) appear to have come off of the roll since 1999, the included costs of these is relatively low in respect of the entire plant (some \$8M). Mr. Driscoll's hypothesis on adding and deleting items from the assessment roll does not appear to match the Respondent's actual practices.

[118] Based on this and Mr. Hall's testimony, the MGB observes that projects like those in issue do not appear to have been historically assessed in the Subject Properties. Conversely the Respondent's recent decision to give LPAU ID numbers to each project performed at the Subject Properties does hint that post-construction projects lately have an increased importance. Mr. Hall convincingly showed the MGB that there were many years for which no new included costs were added to the assessments and indicated that replacement work had occurred constantly throughout this period. Mr. Driscoll could not point to any prior included costs in the same term in support of the assessment approach he now supports.

SUB ISSUE E: Of the projects at issue, which were construction activities and which were not construction activities?

The Complainants' Position

[119] The Complainants requested that none of the costs of the projects at issue before the MGB be assessed and all of the associated included costs be removed from the assessment. The Complainants say the projects at issue were necessary to bring the Subject Properties to their life achievement. The Subject Properties are nearly at the end of their designed life spans. The project work at issue, with the exception of the uprate (Battle River project 196), allowed the plants to continue to function, and was not life extending.

[120] The AFEs provided in evidence show that the projects were not life extension work but rather part of regular maintenance cycles at the Subject Properties. For Battle River, \$20-30M is spent on ongoing maintenance each year. For HR Milner, maintenance expenses are \$6-8M. Maintenance work allows the Subject Properties to continue to operate to their next scheduled outage. It is intended to keep the Subject Properties working reliably and to avoid risks of forced shutdowns. The Subject Properties' owners have contractual obligations to produce power.

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- [121] The Complainants' witness, Mr. Hall, noted that the matter of what is an improvement is a matter of scale and scope. Power generation equipment can be very large and if one is assessing improvements as small as valves, there would be thousands of changes to an assessment every year based on the maintenance of these small parts. The fact that some small parts in a larger piece of equipment are replaced doesn't change the fact that the work is a repair. Sometimes larger elements are replaced too, but the work is still a repair.
- [122] Mr. Hall said that 'upgrade' is a term that is often used in AFEs or CERs because people writing the AFEs think use of the term will make it more likely that the expenditure will be approved. The term used in the AFE doesn't change the physical nature of the work and what is actually done. For example, a turbine seal upgrade project uses the term upgrade, but the contents of that AFE note that one worn out seal was replaced with a new seal. The term upgrade leads people to think that something has been added; however, reading the project descriptions reveals that old existing parts have been replaced. Another example is that the HR Milner derate work was called an upgrade, but in reality it was remedial work to bring the generator back to design output capacity. A case where a project called an 'upgrade' is actually an upgrade is the work on Battle River 5 (project 196) that added 3% output to the generating unit's capacity.
- [123] The Complainants produced two expert witnesses who categorized the projects at issue as either 'replace' or 'reconfigure or replace in kind with present day'. These witnesses were Mr. Malcolm Boyd and Mr. Ken DeBlois.
- [124] Mr. Boyd explained all of the projects under appeal were either 'new' work or work to get Battle River to its life achievement. He called work to get Battle River to life achievement alternatively 'repair', 'replace' or 'reconfigure/replace in kind with present day'. He acknowledged that he did not think in these categories. If he had used his own concepts, he would have characterized projects as 'maintenance' or 'true capital'. Mr. Boyd said that Battle River can't justify work that extends the life of the generating units beyond the duration of the Power Purchase Arrangements. He said that all of the work was done to keep the subject power plant operating.
- [125] Mr. Boyd categorized the Battle River projects at issue (pursuant to the joint recommendations) as either "replacements" and "reconfigure or replace in kind with present day". Mr. Boyd showed the difference between "replacement" and "reconfigure" using work on a boiler as an example:
 - o "Replacement" would involve cutting out a section of boiler tube and putting a new section in. This operation would leave the machine essentially the same machine it was before.
 - o "Reconfigure" would involve moving a boiler tube to a new position where it is not expected to wear as much something Mr. Boyd also called a re-design.

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- [126] He also described "Replace in kind with present day" as work that "doesn't change the output of the machine, so from that view, it's not a better machine". It occurs frequently with instrumentation and controls: because technology changes so quickly, it would be physically impossible to replace what was already there, because it doesn't exist anymore, an example being 1980s digital to 1990s digital. Mr. Boyd said that where technical innovation has made something obsolete, it would actually cost more to try to re-engineer the old part so that the Complainant didn't change anything, and therefore would be nonsensical.
- [127] Mr. Boyd said that when an old part is replaced with current technology, it's not a better machine in terms of output. The current technology may come with added functionality, which is available as part of the new technology, but not needed.
- [128] One of Mr. Boyd's stated difficulties was that depending on what he called a component, he may have categorized the work on a project, (in the context of project 65113) as either a repair or a replacement. If he was just looking at the tube as a component, which is replaced, he would call that a replacement. However, if he was looking at the boiler as a component, he would call the project a repair.
- [129] When asked whether replacement with modern day equivalents reduces operating costs or extends the life of parts, Mr. Boyd acknowledged that Alberta Power (2000) Ltd. is always hoping to improve power availability. There is always some deficiency to be addressed in some component, and the hope that the replacement component is more suitable. Mr. Boyd indicated that the projects either add something new (increasing productivity, output, or adding something needed now but not before) or ensure that Battle River makes it to its life achievement date.
- [130] Mr. DeBlois put the projects into four categories: straight repair, replace, reconfigure or replace in kind with present day, and new. In a CER, HR Milner's employees describe a project they want to do, and send it to the corporate head office for funding approval.
- [131] An example of 'straight repair' would be a weld repair on a boiler tube that has been eroded by fly ash. In contrast, Mr. DeBlois described "replace existing ... using the boiler as an example, if I have an eroded tube which I feel is too large to weld overlay, then I have an option to cut out that piece of tubing and weld the new piece of tubing in place, so that maintenance work is just replacing the existing component that was there."
- [132] For 'reconfigure or replace with present day', Mr. DeBlois paid little attention to 'reconfigure' as the bulk of the projects were maintenance items. If HR Milner could not get the identical part on the market because vendors do not support it, he said he took the next best thing keeping economics in mind, that performs the function he needed it to. Mr. DeBlois said he wanted to replace what he essentially had, or as near a component as originally existed. He acknowledged that the distinction between 'replace existing' and 'replace in kind with present day' was difficult: for example, for the check valve (project 1253), Mr. DeBlois could have called it 'replace', but the difference was that the replacement valves were a different brand than the original, but otherwise almost identical. He said he viewed all of these projects as maintenance projects.

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- [133] Mr. DeBlois described the majority of the projects as ones required to keep the equipment operating. HR Milner could not replace existing components identically. However, it replaced them with the next best thing, to control costs, and get something that closely resembled what was there before. Mr. DeBlois said that "We were not looking for an increase in functionality."
- [134] The Complainants pointed to historical practices in support of their argument that maintenance is not assessable. They said that the Respondent's policies changed. Mr. Hall indicated that the Respondent has changed its past practice in regards to assessing improvements. He showed a graph, based on the 2010 assessment, showing the initial year built of Battle River units 3, 4 and 5, and a period of roughly 20 years where there were no improvements placed on the roll. Looking at the HR Milner plant, there was very little change on the roll until 2006, and then 2008, there were huge increases in included costs. Only communications systems and support systems (fly ash silo, bag house, pulverizer) have been added to the roll over the years. The included costs for major components the boiler, the turbine, the generator, had not. Then in the early 2000s, improvements were captured as new work was completed. The Complainants are concerned that these more recent assessments are capturing annual maintenance expenditures. Battle River spends \$20-30 million and HR Milner spends \$6-\$8 million on annual maintenance work.
- [135] The Respondent's two theories on one hand that a construction crew, an outage and an AFE result a change in specifications and characteristics and on the other, a technical change in specifications is a change in specifications and characteristics are inconsistent and problematic. AFEs are not in the legislation, but actual costs are, so basing assessments on AFEs is wrong. AFEs are requests for authorizations for expenditures. They are not requests for capital construction or a basis for changing specifications and characteristics. The legislation doesn't address metallurgical differences that Mr. Heath called changes to technical specifications of characteristics.

The Respondent's Position

- [136] The Respondent submitted that there was only one issue to be decided: Has the annual project work changed the specifications and characteristics of existing linear property? The Respondent said that replacements of parts are not the same as repairs because they change the specifications and characteristics of the parts that are replaced. When a replacement occurs, a part is deleted and a new part is added in its place.
- [137] As a plant continues to age, more and more replacements are required. These replacements were necessary for the Subject Properties to continue to operate. There's no dispute between Mr. Boyd, Mr. DeBlois and Mr. Heath: all of these projects are replacements. The Respondent said the only person using language like life achievement, routine and non-routine maintenance, and turnarounds was the Complainants' counsel. That is not what the Engineers put in their testimony. They were asked to describe the projects as repair, new, or replace, and that's the evidence that they have disclosed. The Engineers did not give an opinion about major

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maintenance: The witnesses whose evidence was relied upon in the TransAlta decision did not materialize in the present complaint. The Respondent's counsel told the MGB that there is no evidence about maintenance before it.

[138] The Respondent presented evidence through its witness, Mr. Heath. He presented his opinion not on whether the projects before the MGB were repairs, but as to whether projects performed resulted in a change in technical specifications. Mr. Heath said he had personal experience with operating and non-operating equipment, to allow him to look at these AFEs, and said there was not a single one he disagreed with. He said he understood how they work, what their purpose is in the process. He said, for example, "I can tell when the new repairs are going on, are they replacing it with that same type of steel? Are they using something different? Is the mill coating different on the tubing?" He said he could determine if the change resulted in a betterment from the old thing going out and the new one going in.

[139] Mr. Heath said he looked at AFEs from the perspective of the instructions given by the Respondent: is there a change in the technical specifications? He re-phrased this as asking "Is what's going in there different than what's coming out?" His first example was of a damaged boiler tube, which had cracked walls and erosion on the outside of the tubes. Mr. Heath said the brand new tube going in has no inside cracking and no outside wastage, so it is technically different.

[140] Mr. Heath provided evidence on a series of other replacements before the MGB. For example, new blades are more reliable, a stator was returned to good condition, replaced unloaders not as obsolescent as the old ones, new insulation is better than old insulation, new pipe elbows were up to code, new ceramic pipes are more reliable, a vintage auxiliary boiler was replaced with a newer one, a new coal stacker is more modern, new burner nozzles are more durable, worn tubes were replaced with non-eroded tubes – all of which were changes in technical specifications. Mr. Heath emphasized that the point he sought to make was that all of the work resulted in a betterment.

[141] The Respondent's other witness, Mr. Driscoll, said he did not like to use the word 'repair'. He characterized anything at a plant significant enough to generate an AFE as construction: if the plant owners need an AFE, then it's significant enough to be assessable. He qualified his statement that an AFE's existence doesn't mean there was a change in specifications and characteristics. The only thing that did not count as construction were items that were straight repair of an existing component. The replacement of a component, even if there is no change in efficiency or functionality, changes the component's specifications and characteristics, making it not a true repair. He said that there were no 'repairs' presently before the MGB (those being agreed to not being subject of the present discussion). The terms major maintenance and routine maintenance are of no assistance to assessment. A repair is not the same as a replacement. A repair is when you are not replacing a whole component.

[142] Mr. Driscoll said that the project work conformed to the meaning of 'construction' in the CCRG. Mr. Driscoll said "Construction" occurs when: 1) an AFE is required, 2) a plant is shut down, 3) a 'construction' crew comes out, and 4) something in the plant is changed. However,

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changing oil, belts, etc. is not construction, and are excluded under the CCRG. A shut down is required before there can be a construction phase. Mr. Driscoll was asked how one could distinguish a construction crew from a repair crew. Mr. Driscoll's answer was that the people who are working to fix problems in the plant, such as a rotor needing rewinding, are a construction crew.

- [143] Mr. Driscoll elaborated that a project significant enough to generate an AFE is a signal that the project could be construction: if the plant owners need an AFE, then it's significant enough to be assessable. He qualified his statement that an AFE's existence doesn't mean there was a change in specifications and characteristics.
- [144] Mr. Driscoll said changes to specifications and characteristics to linear property are to be assessed each year; be the changes in component inventory; component age; component costs; or location (facility). Conversely, project costs are excluded if the work did not create new linear property, or not change the specifications and characteristics of linear property. In this case, the projects saw the installation of newer, better condition components. Therefore, the new specifications and characteristics of the new parts should be assessed.
- [145] The Respondent said that the Complainants try to fashion their arguments to make the same case as in TransAlta, but the requisite evidence is not before the MGB. The only projects that do not count as construction in this case were straight repairs of existing components. A repair is when you are not replacing a whole component. The replacement of a component, even if there is no change in efficiency or functionality, changes the component's specifications and characteristics, making it not a true repair. The terms major maintenance and routine maintenance are of no assistance in assessment.
- [146] The Respondent requested that the MGB consider that replacement and reconfigure or replace in kind with present day projects' costs should be included in the assessments of the Subject Properties.

Findings: Of the projects at issue, which were construction activities and which were not construction activities?

- The projects at issue were performed for the purposes of keeping the Subject Properties operating.
- The projects at issue were performed for the purposes of allowing the Subject Properties to reach their life achievement.
- Despite the foregoing, Battle River project 196 was performed to increase output capacity. It is only a repair in so far as the parties agreed it to be (7%).

Decision & Reasons: Of the projects at issue, which were construction activities and which were not construction activities?

[147] Having reviewed the AFEs, the MGB found that the Battle River Project 196 constitutes a construction activity. The project was not motivated by the goal of maintaining that power

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plant's life expectancy. Project 196 was performed for the purpose of improving efficiency and increasing profits. The AFE says the project work would improve the operational efficiency of generating Unit 5 by three percent and anticipates substantial economic returns for the investment:

The justification for this project is purely in terms of economics. The [Internal Rate of Return] for the \$10.75 M project expenditure is 89.2% taken over the ten years following installation ... This equates to earnings with a NPV above the earnings that would be obtained from investing the same \$10.75M at the hurdle rate of 12% over ten years.¹

[148] This project added output capacity to the plant in the form of a better turbine, that was not there before and the MGB is satisfied that the work performed – or at least a portion of it -constitutes a construction activity that must be captured in the assessment. Mr. Boyd suggested that because the turbine resulted in a 3% uprate, only 3% of its cost should be considered 'new'. However, this method of allocation is much too simplistic. The proportional increase in output is not necessarily reflective of the proportion of costs that were expended to increase output in relation to the costs of the asset replaced. Further, the Complainant did not put forward any evidence to indicate what those proportional costs might be.

[149] While the MGB finds the main motivation behind Project 196 was to improve the electric power system as a whole, it is appropriate to allocate a small proportion of the costs to repair and maintenance activities. Some work appears to have been done in lieu of scheduled turbine work, and there was obviously a duplication of work in rebuilding a pre-existing turbine and replacing existing parts. Against this background, the parties were able to agree that Project 196 was at least 7% repair. This amount does not seem unreasonable given that projected savings from not having to perform the scheduled turbine overhaul stated in the AFE were only \$1,830,000 (added together from two separate budgets), while the project cost was approximately \$11.2M. Accordingly, MGB finds 7% should be allocated to repair. In the absence of better evidence from the Complainant as to the costs attributable to the uprate, the balance must go to new construction.

[150] Because 93% of the project is a construction activity, 93% of the project costs at issue should be allocated to included costs of Battle River unit 5. The parties agreed on the precise included cost numbers to be added in the event that this project was found to be assessable, taking into account other factors not in dispute before the MGB. As the project appears over two LPAU IDs, 7828900 and 8201145, the 'replace' and the 'replace in kind with present day' portions (50% and 40% respectively) of each LPAU ID are to be part of the assessment. Pursuant to past linear assessment practice, the age of this project should be calculated from the year the project was completed, as described above.

[151] As for the remainder of the projects at issue, the question is whether they were construction activities, or not? The answer is that they were not construction activities. They were activities performed to keep the Subject Properties running to life achievement. The MGB heard from Mr. Heath, Mr. Boyd, Mr. DeBlois and Mr. Hall that there are a significant number of parts in the Subject Properties that wear out on a relatively frequent basis. The Complainants

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¹ Information redacted consistent with sealing order – Appendix "A"

required the Subject Properties to function, and in order to do so, they had to keep them working as various parts wore out.

[152] In making its decision, the MGB notes the following points made by Mr. Boyd and Mr. DeBlois. Mr. Boyd said:

- Replacement projects left machines essentially the same as before.
- The projects in issue were performed to get the Battle River facilities to the end of their life achievement and to keep the subject power plant operating.

[153] Mr. DeBlois said:

- Replace existing is just replacing the existing component that was there.
- For reconfigure or replace in kind with present day, he said "the bulk of these projects were replace in kind maintenance items, so if I cannot get the identical component on the market, if the vendors just do not support that, I will take the next best thing keeping economics in mind, performing and the function I want. I want to replace what I essentially have."
- The majority of my projects were to keep this equipment operating. We could not replace existing components identically, so we replaced them with the next best thing, bearing in mind we wanted to control costs and we wanted to get something that closely resembled what we already had.

[154] Conversely, the Respondent said the projects at issue are replacements, focusing narrowly on technical changes but not looking at the work in the context in which it was performed. Mr. Doug Heath presented the Respondent's only engineering evidence. He noted "In all cases what the plant engineers have done is exactly what I would expect to see done in any power plant." Mr. Heath's stated instructions were "to include age and condition as technical changes in specifications." Mr. Heath tried carefully to avoid using the term 'repair' to describe the projects in issue. Although Mr. Heath avoided the term 'repair' in his testimony, his description of the work undertaken is most naturally captured by the concept of repair or maintenance. Toward the end of his cross examination, Mr. Heath acknowledged that the work done to replace tubes in the water wall was a "maintenance activity". He had described this work in his testimony as "a technical change to the specifications of characteristics of the boiler compared to the tubes that were removed".

[155] The MGB concludes that the remainder of the projects at issue were post-construction activities. The purpose of each of the projects before the MGB was obviously not simply about changing technical specifications of some power plant component to have different technical specifications. The fact that the projects at issue were not technically described by the Engineers as 'straight repairs' does not make the projects not repairs. The purpose was to keep the plants running to their life achievement. Mr. Hall's evidence was that these projects were performed to for maintenance and repair and to allow the Subject Properties to reach their life achievement. In a sentence, having heard from Mr. Boyd and Mr. DeBlois, and having read the AFEs, the MGB

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is satisfied that the projects at issue (except Battle River project 196) were performed for the purpose of keeping the Subject Properties operating.

[156] As a result of not being construction activities, the expenses of the remainder of the projects at issue should not form part of the Subject Properties' included costs.

[157] The parties' joint recommendations should be accepted. They are fair, reasonable and a good effort to resolve contentious issues over correct assessment practices. The parties provided the MGB with three alternative calculations. On the basis of the MGB's decision, only the costs of projects categorized as new, with the exception of project 196, form part of the Subject Properties' included costs. The MGB's decision with respect to changed assessments of the Subject Properties is attached as Appendix "F".

It is so ordered.

No costs to either Party.

Dated at the City of Edmonton, in the Province of Alberta, this 21st day of June, 2012.

MUNICIPAL GOVERNMENT BOARD

(SGD) D. Thomas, Presiding Officer

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IV. APPENDICES

APPENDIX "A"

PRELIMINARY/PROCEDURAL ISSUES

- [1] The following preliminary or procedural matters arose during the hearing and are dealt with in this appendix for convenience:
 - 1. The Complainants requested that the MGB seal confidential information contained in the Complainants' submissions;
 - 2. The Respondent requested the MGB restrict the scope of the Engineers' testimony to their filed evidence;
 - 3. The Complainants requested that the MGB admit portions of the Assessor's testimony, in transcript form, from a prior hearing;
 - 4. Both Parties expressed concerns about the expertise of each other's witnesses.

Issue 1: Sealing Confidential Information Contained in the Complainants' Submissions

- [2] The Complainants requested the Board to seal some of their filed exhibits, which they said contain confidential and commercially sensitive information. The documents in question are: exhibit C-1 Tabs N, Q, R, S & T, and all of exhibits C-4 and C-5, as outlined in their letter marked C16. The Respondent took no position on this matter.
- [3] Having reviewed the documents, the MGB accepts their unfettered release may have negative consequences for the Complainants. Accordingly, the documents listed above are ordered sealed pursuant to Procedure Guide Section 9.3.

Issue 2: Restricting the Scope of Engineers' Testimony

- [4] The Respondent objected to Mr. Boyd's characterization of maintenance as routine, non-routine and major non-routine. The Respondent said these opinions should have been included with the Complainants' disclosure. As they were not, the Respondent objected to the use of terms such as major maintenance, minor maintenance, turnaround, etcetera, which were used in the TransAlta decision. The Respondent feared that by using this terminology, the Complainants' witnesses were surreptitiously introducing new evidence not previously disclosed to match the findings in TransAlta. The Respondent also objected to Mr. Boyd referring to Mr. Heath's report, and to his comments on the function of replacement parts.
- [5] In answer to these objections, the Complainant argued that its witnesses' testimony merely explains what work was done and why, which is factual information the Board needs to decide the fundamental question about whether the projects created assessable property.
- [6] In an oral ruling, the MGB indicated it was prepared to hear Mr. Boyd's comments with respect to each item at issue and his rationale as to why he had categorized it the way he had in

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his report. This evidence would help clarify how the engineers had gone about categorizing the projects in their reports, without necessarily using the TransAlta terminology.

[7] The Board notes parenthetically that issues of disclosure also arose in DL 038/11. That order allowed the Respondent to prepare a surrebuttal response to the Complainants' Engineers' reports. It also found that the scope of disclosure was sufficient to describe the work performed and to allow both sides a fair opportunity to understand the case against them prepare for the hearing. This finding was borne out as the proceedings unfolded.

Issue 3: Admitting the Assessor's Testimony from Transcripts of a Prior Hearing

- [8] A question arose about whether to admit a transcript of Mr. Imrie's testimony from the TransAlta hearing about a report he authored for that purpose. The Complainants suggested the transcript would be useful since (1) the current Imrie Report is similar to the one filed for TransAlta, and (2) Mr. Imrie is no longer available to speak to his report, having been replaced by Mr. Driscol, who has now adopted it as his own.
- [9] Following an objection from the Respondent and some initial comments from the panel, the Complainants indicated they would refrain from asking for a ruling on the matter, at least until after Mr. Driscol had testified. At that point, the Complainants chose not to pursue the matter; therefore, the transcript was not admitted into the record.

Issue 4: Witness Expertise

- [10] The Complainants noted Mr. Heath is not accredited by APEGGA as a professional engineer; therefore, they questioned whether he is competent to give expert engineering opinions about technical changes in specifications and characteristics. The Complainants also questioned whether the Board should place any weight on Mr. Shymanski's report, given that he did not testify before the MGB at all.
- [11] For its part, the Respondent noted that Mr. Hall is not an accredited assessor or appraiser and has no experience in power plant design or testifying before energy regulatory boards. Accordingly, it said his opinions in these areas should be ruled inadmissible or given no weight. In support, the Respondent cited R v. J (J.L.), 2000 SCC 51, Practice and Procedure Before Administrative Tribunals by Macaulay and Sprague, and Alberta (Workers' Compensation Board) v. Alberta (Workers' Compensation Board Appeals Commission), 2005 ABCA 276.
- [12] The MGB is not bound by the rules of evidence. However, common sense suggests that an opinion about a matter requiring specialized knowledge is of little value when delivered by a witness who lacks that knowledge. The MGB notes that the *Alberta (Workers' Compensation Board) v. Appeals Commission*, 2005 ABCA 276 decision at para. 67 says "In an administrative law context, "[r]elevant expert evidence is admissible. Any frailties in the facts or hypotheses upon which an opinion is based, or in the qualifications of the expert, affect the weight of the evidence, but not its admissibility"." Therefore, to the extent the witnesses in question strayed beyond factual considerations, their opinions were accorded weight when speaking to matters

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within their specialized area of knowledge as developed by their qualifications or work experience (noted earlier in the body of this order).

[13] With respect to Mr. Heath, the Board found his qualifications - particularly his experience working in power plants – gave him specialized knowledge about various plant components and their function. Opinions he expressed in that regard were given due consideration. As for Mr. Hall, his extensive experience as a tax agent allowed him to provide the MGB with a useful practical perspective on the projects at issue in the assessment context. Lastly, Mr. Shymanski is known to the Board and undoubtedly possesses specialized knowledge; however, he was not present to be cross examined or to explain how the terms he used relate to those used by other witnesses in the course of the hearing. His evidence was therefore of limited use in the context of this appeal.

APPENDIX "B"

ATTENDANCE AT THE MARCH 5, 2012 TO MARCH 14, 2012 SESSION

NAME CAPACITY

G. Ludwig, Esq.
C. Hall
M. Boyd
K. DeBlois
Counsel for the Complainants
Witness for the Complainants
Witness for the Complainants

Ryan Ford AEC international L. Kennedy For the Complainants

C. Zukiwski, Esq.
K. Becker–Brookes, Esq.
D. Heath
D. Driscoll
Counsel for the Respondent Witness for the Respondent Witness for the Respondent

M. Georgeson Respondent Staff
A. Slotsve Respondent Staff
B. Therrien Respondent Staff

B. Hepp County of PaintearthG. Glazier County of PaintearthW. Weber County of Paintearth

R. Fortin MD of Greenview

ATTENDANCE AT THE MAY 22, 2012 SESSION

* By Telephone

*G. Ludwig, Esq. Counsel for the Complainants

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*C. Hall	Witness for the Complainants
*C. Zukiwski, Esq.	Counsel for the Respondent
D. Imrie	Respondent Staff
M. Tautchin	Respondent Staff
B. Therrien	Respondent Staff
J. Chabot	Observer – MGB Staff
J. Wilson	Observer – MGB Staff
T. Mallett	Observer – MGB Staff
A. Burden	Observer – MGB Staff

APPENDIX "C"

EXHIBITS RECEIVED THROUGHOUT COMPLAINTS PROCESS

NO.	ITEM
C1	Alberta Power (2000) Ltd., Complainants' Disclosure (Book I)
C2	Milner Power Limited Partnership, Complainants' Disclosure (Book II)
C3	Complainants' Brief
C4	Alberta Power (2000) Ltd., Capital Expenditure Requests Evidence (Book III)
C5	Milner Power Inc., Authorization for Expenditure Evidence (Book IV)
C6	1996 Electric Tariff Applications (Book V)
C7	1999/2000 Electric Tariff Applications (Book VI)
C8	Alberta Power (2000) Ltd., Maxim Power Limited Partnership,
	Complainants' Combined Rebuttal
C9	Rebuttal Brief of the Complainants
C10	Supplementary Brief
C11	Ken DeBlois – Curriculum Vitae
C12	Malcolm Boyd – Curriculum Vitae
C13	Complainants' Recommendations, Battle River
C14	Complainants' Recommendations, HR Milner
C15	Cameron Hall – Curriculum Vitae
C16	March 13, 2012 Letter Identifying Documents under Seal
C17	May 3, 2012 Letter and Attachment.
R1	Respondent's Legal Argument
R2	Witness Report by David Imrie
R3	Statement of Renoir Consulting by Doug Heath
R4	Commentary by Barry Shymanski
R5	Volume of Legislation
R6	Volume of Documents
R7	Volume of Documents – Battle River

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R8	Volume of Charts
R9	Timelines for HR Milner
R10	Volume of Recommendations for Battle River and HR Milner
R11	[Exhibit number reserved in DL 038/11]
R12	[Exhibit number reserved in DL 038/11]
R13	[Exhibit number reserved in DL 038/11]
R14	[Exhibit number reserved in DL 038/11]
R15	Dan Driscoll – Curriculum Vitae
R16	Revised Recommendations for R10
R17	BR AFE Comparison Chart
R18	Nova Chemicals Corporation v Lacombe County, MGB 002/03
R19	March 15, 2012 email with 1998 & 1999 Request for Information
	Handbooks (received after the hearing)
R20	May 2, 2012 Letter and Attachment – Battle River Vintages
R21	May 3, 2012 letter and Attachments – HR Milner Joint Recommendations
R22	May 25, 2012 Letter and Attachments, including Battle River Joint
	Recommendations

APPENDIX "D"

LINEAR PROPERTY ASSESSMENT UNIT IDENTIFICATION NUMBERS FOR THE GEN ACCS UNDER APPEAL

	GEN 101		GEN 102	GEN 111
7495573	7496083	7496431	7495578	7495619 7496474
7495576	7496084	7496432	7495579	7495620 7496651
7495577	7496085	7496433	7495722	7495621 7496652
7495580	7496086	7496601	7495723	7495622 7496800
7495581	7496087	7496604	7495881	7495769 7496801
7495582	7496088	7496754	7496082	7495770 7496802
7495583	7496089	7496755	7496430	7495930 7829482
7495584	7496090	7496756	7496603	7496136 7829483
7495720	7496260	7496757	7496758	7496137 7829484
7495721	7496261	7828897	7828900	7496138 8195902
7495724	7496262	7828898	8201145	7496312 8257512
7495880	7496265	8201142	8257616	7496313
7495882	7496266	8201143		7496314
7495883	7496267	8201144		7496315
7495884	7496427	8257615		7496316
7496081	7496428			7496473

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APPENDIX "E1"

PROJECTS THAT ARE NOT AT ISSUE AS PER JOINT RECOMMENDATIONS (Not linear property, or no change to specification and characteristics, or point in time, or new):

Battle River, By AFE Number

Buttle River, By III E Number					
534	33690	56497	72093	77019	80067
539	40429	57072	72481	77181	80426
1051	44701	59911	72807	77691	81216
1188	44926	60004	72808	78041	81496
1256	45103	64193	73027	78275	81497
1274	45880	65109	73465	78674	81765
1285	45942	65193	74661	78676	81792
11897	46738	66043	74874	79575	81799
19864	50437	66335	75062	79738	81996
31008	50461	70926	76329	79931	82293
31660	53054	71500	76330	79949	87966
31681	56226	72082	76331	80066	

HR Milner, By CER Number

1044	1232	1273	1291	1307	5013
1208	1234	1280	1293	1319	
1212	1235	1281	1294	1320	
1214	1241	1282	1295	1322	
1219	1243	1285	1296	1325	
1226	1244	1287	1297	4003	
1229	1248	1289	1302	4008	

APPENDIX "E2"

PROJECTS AT ISSUE, THE INCLUDED COSTS OF WHICH ARE UNDER DISPUTE

BATTLE RIVER, By AFE Number

196	43106	57921	67340
1217	43107	58304	67346
1347	44263	58304	70574
10009	44681	63274	71581
20534	44927	65092	72210
22191	47890	65096	76453
31722	47891	65113	79944
32611	52521	65116	79945
33135	55939	65194	
39549	55940	66344	

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HR MILNER, By CER Number

1022	1253
1035	1276
1206	1298
1209	1303
1210	1304
1225	1311
1228	

APPENDIX "F"

BATTLE RIVER – REVISED ASSESSMENTS

LPAU ID	Assessment Under Complaint, \$	Revised Assessment, \$	Disposition
7495576	141,580	0	Decrease
7495578	102,810	0	Decrease
7495721	38,700	0	Decrease
7496265	1,509,190	0	Decrease
7496603	7,202,510	6,217,360	Decrease
7828897	10,280	0	Decrease
7828900	7,741,160	7,160,890	Decrease
8201142	477,540	0	Decrease
8201144	1,791,710	102,220	Decrease
8201145	56,820	52,840	Decrease
8257615	3,041,630	33,250	Decrease
8257616	3,694,320	262,820	Decrease

REDUCTION OF \$11,978,870.

HR MILNER – REVISED ASSESSMENTS

LPAU ID	Assessment Under Complaint, \$	Revised Assessment, \$	Disposition
7495769	5,370	0	Decrease
7496800	75,650	0	Decrease
7829484	2,263,950	0	Decrease
8195902	673,980	12,380	Decrease
8257512	3,356,490	1,480,510	Decrease

<u>REDUCTION OF \$4,882,550.</u>

The assessments are confirmed in respect of all other LPAU IDs under complaint.

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