Advisor alert—*Lease accounting considerations for buyers in power purchase agreements*

Executive summary

Introduction

A power purchase agreement (PPA) is a long-term contract under which an entity (the Buyer) agrees to purchase energy (e.g., electricity or thermal energy) for a period of time from another entity that generates the energy (the Seller), usually as a method of fixing the Buyer's price of energy. As the market for these contracts evolves, the structure of and terms and conditions in these contracts continue to change, which can add complexity to the accounting.

This publication will focus on a PPA whereby the Buyer purchases power from a Seller that legally owns and installs an asset on the Buyer's property for the life of the contract and produces energy for the use of the Buyer. The purpose of this publication is to outline the key decision points a Buyer must make in such a scenario in determining (1) whether the PPA is (or contains) a lease, and (2) the resulting measurement impact on its balance sheet and statement of operations. The specific terms of each PPA are critical in making these determinations, as well as a detailed understanding of the accounting requirements that is beyond the scope of this publication.

The following appendices are an integral part of this publication and expand upon the analysis in the executive summary:

- Appendix A – Overview of accounting requirements
- Appendix B – Overview of lease definitions and financial statement presentation by accounting framework

Scenario

Buyer A enters into a contract to purchase electricity and thermal output produced from an asset owned by Supplier B, but installed at Buyer A's premises. The Supplier designs, develops, constructs, owns, operates and maintains the asset. The contract states that the Supplier must use its best efforts to provide the Buyer with electricity and thermal output from the asset and provide back-up power when required. The Buyer must accept all electricity and thermal output that is produced from the asset prior to using other sources of energy. The monthly payment over the term of the contract is determined based on the energy produced by the asset (i.e., $X per megawatt hour of electric and thermal energy). There are no other payments required under the contract and there were no initial direct costs related to the contract.

Sources of accounting guidance

Appendix B provides a high level summary of the lease definition, lease classification(s) and financial statement presentation from the lessee's perspective under International Financial Reporting Standards (IFRS) (IAS 17 *Leases* and its related interpretations or IFRS 16 *Leases*[1]), Canadian Accounting Standards for Private Enterprises (ASPE) Section 3065 *Leases* and Public Sector Accounting Standards (PSAS) Public Sector Guideline 2 *Leased Tangible Capital Assets*:

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[1] IFRS 16 is a new standard that is effective for annual periods beginning on or after January 1, 2019, with earlier application permitted. It will replace IAS 17 and its related interpretations within IFRS.

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Summary of considerations

The following table is a summary of considerations related to the scenario described above. It bears repeating that a final determination cannot be made without an in-depth understanding of both the terms of the PPA and the related lease accounting guidance in the accounting framework.

	IFRS 16	IAS 17 and related interpretations	ASPE	PSAS
(1a) Is the PPA a lease?	PPA may not be a lease **IF** the Buyer 1. does not have the right to substantially all of the output from the asset over the period; or 2. cannot direct the use of the asset by having a right to determine how and for what purpose the asset is used throughout the period of use (e.g., when and whether energy is produced and how much)	May not be a lease **IF** the Buyer takes virtually all of the output from the asset and the per unit price is fixed or equal to the current market price at the time of delivery	Likely to be a lease	
(1b) If a lease, what classification?	Not applicable. IFRS 16 does not distinguish between types of leases for lessees	Finance lease **IF** 1. it is reasonably assured that the Buyer will obtain ownership of the asset; 2. the lease term is for a major portion of the economic life of the asset; 3. at inception of the lease, present value (PV) of the minimum lease payments (MLP) equals substantially all of the fair value of the leased	Capital lease **IF** 1. it is reasonably assured that the Buyer will obtain ownership of the asset; 2. the lease term is for a major portion (usually 75 percent or more) of the economic life of the asset; or 3. at inception of the lease, PV of the MLP amounts to substantially all (usually 90 percent or more) of the fair value of the leased	Leased tangible capital asset **IF** 1. it is reasonably assured that the Buyer will obtain ownership of the asset; 2. the lease term is for a major portion (usually 75 percent or more) of the economic life of the asset; 3. at inception of the lease, PV of the MLP amounts to substantially all (usually 90 percent or more) of the fair value of the leased asset; or

<table>
<tr><th></th><th>IFRS 16</th><th>IAS 17 and related interpretations</th><th>ASPE</th><th>PSAS</th></tr>
<tr><td></td><td></td><td>asset; or
4. the asset is of a specialized nature.

Operating lease if it is not a finance lease</td><td>asset.

Operating lease if it is not a capital lease</td><td>4. the asset is of a specialized nature.

Other, if it is not a tangible capital asset lease</td></tr>
<tr><td>(2) Measurement impact</td><td>Variable lease payments ($X per megawatt hour) are not included in the measurement of the right-of-use (ROU) asset and lease liability, thus there would be a minimal balance sheet impact

However, if the payments represent in-substance fixed payments (e.g., base level of usage), then the in-substance fixed portion would be included in the measurement of the ROU asset and lease liability, and would impact the balance sheet</td><td colspan="2">Variable lease payments that depend on factors other than the passage of time ($X per megawatt hour) are not included in the measurement of the lease asset and lease liability; as such, there would be a minimal balance sheet impact</td><td>Variable lease payments that depend on factors other than the passage of time are not included in the measurement of the leased tangible capital asset and lease liability, and would have minimal balance sheet impact

However, when some portion of the factor is reasonably estimable at the inception of the lease (for example, minimum capacity or expected power usage), that amount is included in the measurement of the leased tangible capital asset and related lease liability</td></tr>
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Next steps

Buyers of electricity in a PPA must consider whether their PPA is or contains a lease. These agreements can be complex and the specific terms and conditions in a PPA can vary significantly from entity to entity. This publication provides some general considerations when considering the two important issues that determine the lease accounting implications of your PPA. Your Grant Thornton advisor is here to help with a more in-depth analysis.

Appendix A – Overview of accounting requirements

Issue #1 – Does the PPA meet the definition of a lease?

The specific details of each contract and the relevant accounting framework are critical in determining whether the contract contains a lease. As further articulated in Appendix B, the definitions of a lease in IFRS 16, IAS 17, ASPE and PSAS are similar in that the Buyer has the right to use a specified asset for a period of time. However, IFRS 16 alone provides a greater emphasis on control by focusing on whether the Buyer has the right to substantially all of the economic benefits that would come from using the asset during the period and the right to direct the use of the asset throughout the period of use. As a result, some PPAs that are considered leases under IAS 17, ASPE or PSAS may not be leases under IFRS 16.

Some specific considerations for a PPA, under the frameworks, include:

- When the asset is being used by the Supplier to provide power to other entities, then the PPA may not provide rights similar to those arising if the Buyer owned the asset.
- Conditions that require the Buyer to take all of the output from the asset may suggest they obtain substantially all of the benefits from the asset.

IFRIC Interpretation 4 *Determining Whether An Arrangement Contains A Lease*, an interpretation of IAS 17, scopes out a PPA (or any other contract) from having to apply lease accounting when the PPA specifies that the unit price paid by the Buyer is either fixed per unit of output or at fair value per unit of output at the time of delivery and the Buyer is buying substantially all of the output from the asset. This rule does not exist under the other accounting frameworks.

Lease or not a lease: why does it matter?

IAS 17, ASPE and PSAS

Under these standards, when a PPA is (or contains) a lease, the Buyer must assess its classification as either a finance (IAS 17)/capital (ASPE)/tangible capital asset (PSAS) lease or an operating lease. Operating leases result in what is often referred to as off-balance sheet treatment, while finance/capital/tangible capital asset leases result in the recognition of a lease-related asset and lease liability presented on the balance sheet, with depreciation and interest recorded over the term of the lease. Appendix B provides further information on the lease classification criteria.

IFRS 16

IFRS 16 introduces a single lease accounting model and requires a lessee to recognize all leases on the balance sheet as a right-of-use (ROU) asset and lease liability (with exceptions for short-term or low value leases). Once the Buyer determines the PPA is or contains a lease, there will be an immediate balance sheet impact. Subsequently, the statement of operations is impacted when the ROU asset is depreciated and interest is recorded on the lease liability.

What we think

The determination of whether or not a PPA contains a lease is critical for those Buyers that have adopted or will adopt IFRS 16 because it will determine whether or not an ROU asset and lease liability are recognized on the balance sheet, as well as the resulting impact on the statement of operations. The additional focus by IFRS 16 on who has control over the asset during the lease term such that they can direct "how and for what purpose" the asset is used and benefit from that use will require Buyers to review their contracts closely. When the Buyer makes the decisions as to when, if and how much energy is produced, then they most likely have the power over the right to direct the asset. However, in some cases, decisions about how and for what purpose an asset is used are predetermined and cannot be made by either the Buyer or the Supplier during the period of use. This could happen if, for example, all decisions about how and for what purpose the asset is used are agreed upon between the Buyer and Supplier in negotiating the contract and cannot be changed after the commencement date of the lease, or if they are predetermined by the design of the asset. In those cases, the assessment of whether or not the PPA contains a lease may depend on which party has the right to operate the asset or designed the asset.

For Buyers reporting under IAS 17, ASPE or PSAS, the additional step of classifying a lease as either a finance/capital/tangible capital asset lease or an operating lease will determine the on-balance sheet or off-balance sheet presentation for the lease. A PPA that is not or does not contain a lease will result in the treatment of the contract as a service contract.

Issue #2 – Measurement implications for leases recognized on balance sheet

Once a Buyer has determined that they have a finance/capital/tangible capital asset lease under IAS 17, ASPE or PSAS, or that the PPA is or contains a lease under IFRS 16, they still have to measure the amounts they record on the balance sheet, which will, in turn, impact charges to the statement of operations. The nature and structure of lease payments (fixed, variable or in-substance fixed) may affect the amount of the asset and liability.

Under IFRS (including both IAS 17 and IFRS 16) and ASPE, the present value of the future lease payments is included in the determination of the ROU/lease asset and lease liability. However, variable payments in a PPA that depend on factors other than the passage of time (for example, megawatts per hour) would not be included in the future lease payments used to calculate the ROU/lease asset and lease liability.[2] Contracts that are entirely based on these types of variable payments would result in the ROU/lease asset and liability being measured at zero, and would have no balance sheet effect. Rather, the variable payments would be expensed in the statement of operations as the power is purchased by the Buyer. So, in the event of a Buyer concluding that they have a lease under IFRS 16 or a finance/capital lease under IAS 17/ASPE, there may be no practical impact on the balance sheet if all payments under the PPA are considered variable. In other words, the resultant accounting would be similar to that of an operating lease.

PSAS is similar, with one important exception: contingent rental payments (i.e., variable payments) are included in the measurement of the leased tangible capital asset and liability when some portion of the factor is reasonably estimable at the inception of the lease (for example, minimum capacity or expected usage). Thus, if there is a certain level of energy usage expected or the contract specifies a minimum capacity, that amount would be included in the measurement of the leased tangible capital asset and related lease liability.

In concluding whether lease payments are fixed or variable, it is important to note that IFRS 16, and only IFRS 16, requires the Buyer to assess whether any of their variable payments are, in-substance, fixed. If so, the amounts are included in the determination of the lease liability and ROU asset. Examples of in-substance lease payments are included in Appendix B.

What we think

When a Buyer concludes that their PPA is or contains a lease under IFRS 16 or a finance/capital lease under IAS 17/ASPE, there may be no practical impact on the balance sheet if all payments under the PPA are considered variable. A tangible capital lease under PSAS requires further analysis of any variable payments to determine any potential balance sheet impact.

[2] Under IFRS 16, the Buyer would include variable payments based on an index or rate such as the Consumer Price Index, inflation or current market rates in the calculation of the lease asset or liability.

Appendix B – Overview of lease definitions and financial statement presentation by accounting framework

	IFRS 16 *Leases*	IFRS IAS 17 *Leases* & IFRIC 4 *Determining Whether an Arrangement Contains a Lease*	ASPE Section 3065 *Leases*	PSAS Public Sector Guideline 2 *Leased Tangible Capital Assets*
Lease definition	A contract, or part of a contract, that conveys the right to use an asset (the underlying asset) for a period of time in exchange for consideration	The conveyance, by a lessor to a lessee, of the right to use an asset, usually for a specified period of time in return for payment(s)		
Additional guidance to determine if a contract contains a lease	1. There must be an identified asset. 2. The customer must control (i) the right to obtain substantially all of the economic benefits (e.g., profits) from the use of the asset; and (ii) the power to direct the use of the asset throughout the period of use. Which decision-making rights direct "how and for what purpose" the asset is used and who has those rights are important for item 2(ii). In the rare cases where these relevant decisions (e.g., quantity and timing of delivery of power) are predetermined during the contract negotiations or by the design of the asset, the Buyer is considered to have the power to	The contract must 1. be dependent on the use of a specific asset; and 2. convey a right to use an asset	No additional explicit guidance	No additional explicit guidance

	IFRS 16 *Leases*	IFRS IAS 17 *Leases* & IFRIC 4 *Determining Whether an Arrangement Contains a Lease*	ASPE Section 3065 *Leases*	PSAS Public Sector Guideline 2 *Leased Tangible Capital Assets*
	direct the use of the asset when the Buyer 1. has the right to operate (or to direct others to operate) the asset in a manner that it determines throughout the period of use, without the Supplier having the right to change those operating instructions; or 2. designed the asset (or specific aspects of the asset) in a way that predetermines how and for what purpose the asset will be used throughout the period of use			
Lease classification for lessees	Not applicable. Only a single category of leases for lessees, resulting in most leases being recognized on the balance sheet (with an exception for short-term or low value leases)	Leases are classified by lessees as either 1. finance (IAS 17)/capital (ASPE)/tangible capital asset (PSAS) leases; or 2. operating leases. The general principle is that leases are finance/capital/tangible capital asset leases when substantially all of the benefits and risks incidental to ownership of the property have been transferred to the lessee. Situations that result in finance/capital/tangible capital asset lease classification include: 1. there is reasonable assurance that the lessee will obtain ownership of the asset by the end of lease term;[3] 2. the lease term represents a major portion of the economic life of the asset. Under		

[3] Reasonable assurance that the lessee will obtain ownership of the asset by the end of the lease term exists when the lessee has an option to purchase the asset at a price that is expected to be sufficiently lower than the fair value of the asset at the exercise date.

	IFRS 16 *Leases*	IFRS IAS 17 *Leases* & IFRIC 4 *Determining Whether an Arrangement Contains a Lease*	ASPE Section 3065 *Leases*	PSAS Public Sector Guideline 2 *Leased Tangible Capital Assets*
		ASPE and PSAS, this is usually the case when the lease term is 75 percent or more of the economic life of the asset. IAS 17 has no such bright-line; or 3. at the inception of the lease, the present value (PV) of the minimum lease payments (MLP) amounts to substantially all of the fair value of the leased asset. Under ASPE and PSAS, this test is met when the PV of the MLP is 90 percent or more of the fair value of the asset at the inception of the lease; IAS 17 has no such bright-line.		
		Examples of some of the other factors IAS 17 lists that may result in finance lease classification include when the • asset is of such a specialized nature that only the lessee can use it without major modifications; • lessee can cancel the lease and it must bear all of the lessor's losses associated with the cancellation; or • lessee has the ability to extend the lease at a rent that is substantially lower than market rent	ASPE does not provide additional considerations	PSAS also places emphasis on other factors that may lead to tangible capital lease classification including when the • asset is of a specialized nature; • public sector entity (PSE) has provided financing to acquire or construct the asset, including loan guarantees; • PSE has control over idle capacity of the asset; or • PSE has the residual risk or benefits, operating, business, demand or other potential risks
Financial	All leases → recognized on the	Finance (IAS 17)/capital (ASPE)/leased tangible capital asset (PSAS) lease →		

	IFRS 16 *Leases*	IFRS IAS 17 *Leases* & IFRIC 4 *Determining Whether an Arrangement Contains a Lease*	ASPE Section 3065 *Leases*	PSAS Public Sector Guideline 2 *Leased Tangible Capital Assets*
statement presentation (lessee) → Balance sheet	balance sheet as a right-of-use (ROU) asset and lease liability[4]	recognized on the balance sheet as a leased asset and lease liability		
Financial statement presentation (lessee) → Statement of operations	All leases → recognize depreciation on the ROU asset and interest on the lease liability[4]	Finance (IAS 17)/capital (ASPE) lease → depreciation/amortization recognized on the leased asset and interest recognized on the lease liability Operating lease → payments expensed on a straight-line basis over the lease term		Leased tangible capital asset → amortization recognized on the leased tangible capital asset and interest recognized on the lease liability Operating lease → no additional guidance provided
Variable lease payments that are in-substance fixed lease payments	Examples: • Payments structured as variable lease payments, when there is no genuine variability (e.g., a lease payment that is made if the underlying asset operates during the period or payments must be made if an event occurs that has no possibility of not occurring). • Payments that become fixed	Not applicable for IAS 17, ASPE or PSAS		

[4] Note: there are two exceptions provided for short-term leases with a lease term less than 12 months and low value asset leases. For these types of leases, the payments are generally expensed on a straight-line basis over the lease term. Power purchase agreements will generally not fall within either of these exceptions.

	IFRS 16 *Leases*	IFRS IAS 17 *Leases* & IFRIC 4 *Determining Whether an Arrangement Contains a Lease*	ASPE Section 3065 *Leases*	PSAS Public Sector Guideline 2 *Leased Tangible Capital Assets*
	once the lessee hits a base level of energy produced from the asset in the first year. The future payments after the base level was hit are in-substance fixed payments because this contract is constructed knowing that the variability threshold will most likely be met. • A situation where there is more than a single set of potential payments a lessee may have to make, but only one option is realistic. • A set of potential payments exists but the lessee will have to make at least one, so the set of payments that adds to the lowest amount (on a discounted basis) are the in-substance fixed payments.			