

Technical Line

FASB – final guidance

How the new revenue recognition standard affects midstream oil and gas entities

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What you need to know

- ▶ Midstream oil and gas entities may reach different conclusions than they have under legacy GAAP when they apply the new guidance on whether they are acting as a principal or an agent for the sale of commodities.
- ▶ Midstream oil and gas entities need to apply judgment when accounting for service and commodity sales contracts, especially those that include noncash consideration and tiered pricing provisions.
- ▶ Applying the new standard requires changes to an entity's accounting policies, processes and internal controls and may also require changes to its information technology systems.
- ▶ Many entities found that implementation requires significantly more effort than they expected, even when the accounting effects are not significant.

The new revenue recognition standard¹ issued by the Financial Accounting Standards Board (FASB or Board) requires entities in the midstream oil and gas industry to make additional judgments and estimates, such as determination of principal versus agent.

This publication highlights key aspects of applying the FASB's standard to a midstream oil and gas entity's contracts with its customers, addresses significant changes to legacy practice and reflects the latest implementation insights. The term midstream oil and gas entities refers to entities engaged in the gathering, processing, transportation and storage of natural gas, as well as the transportation and storage of crude oil and other refined products.

As a reminder, the FASB deferred² the effective date to annual periods beginning after 15 December 2019 and interim periods in annual periods beginning after 15 December 2020, for entities that had not yet issued (or made available for issuance) financial statements that reflected the standard as of 3 June 2020 (i.e., certain private and not-for-profit entities). Early adoption is permitted. The deferral is intended to give these entities more time to implement the standard, given the operational and financial reporting challenges of the COVID-19 pandemic. Public entities, as defined by the standard, and some private and not-for-profit entities were already required to adopt the standard.

This publication, which contains a summary of the standard in the appendix, supplements our Financial reporting developments (FRD) publication, [*Revenue from contracts with customers \(ASC 606\)*](#), and should be read in conjunction with it. While many entities have adopted the standard, implementation issues may continue to arise. Accordingly, the views we express in this publication may continue to evolve as implementation continues and additional issues are identified.

Midstream oil and gas entities should also keep in mind that, when they adopt the new credit impairment standard,³ they will need to estimate full lifetime expected credit losses for their accounts receivable and contract assets. As a reminder, they will need to do this after assessing collectibility under the revenue guidance to determine whether they have a contract with a customer. Refer to our FRD publication, [*Credit impairment for short-term receivables under ASC 326*](#), for more information.

Principal versus agent considerations

When more than one party is involved in providing goods or services to a customer, the standard requires a midstream entity to determine whether it is a principal or an agent by evaluating the nature of its promise to the customer (e.g., an upstream producer or end customer). An entity is a principal and therefore records revenue on a gross basis if it controls a promised good or service before transferring that good or service to the customer. An entity is an agent if it does not control the promised good or service before transfer to the customer. If the entity is an agent, it records as revenue the net amount it retains for its agency services (i.e., to arrange for another entity to provide the goods or services).

An entity cannot provide the specified good or service to a customer (and therefore be a principal) unless it controls that good or service prior to its transfer. That is, as the Board noted in the Background Information and Basis for Conclusions of Accounting Standards Update (ASU) 2016-08,⁴ control is the determining factor when assessing whether an entity is a principal or an agent.

Because it may not be clear whether an entity controls the specified good or service, the standard provides three indicators of when an entity controls the specified good or service and is therefore a principal. These indicators are meant to support an entity's assessment of control, not to replace it, and each indicator explains how it supports the assessment of control. A midstream entity should carefully consider the facts and circumstances of its arrangements, particularly if its assessment of the definition of control and the principal indicators result in different conclusions regarding control of specified goods or services. This is because the entity's assessment of control and the principal indicators should align.

For example, a midstream entity may have a contract with a producer to market and sell the producer's product to a third party. Both the midstream entity and the producer need to determine whether the midstream entity is acting as a principal or an agent in the arrangement. The midstream entity will use the assessment to determine which party is the customer and whether to record product revenue based on the purchase and sale of the commodity or service revenue for the amount it retains for marketing services provided to the producer.

Midstream entities may reach different conclusions about whether they are acting as principals or agents in different contracts, depending on the facts and circumstances.

Midstream entities should consider whether and when they obtain control of the producers' product for sale to the end customer. Because there are various ways midstream entities can obtain and transfer a product (i.e., at the wellhead, inlet or tailgate of the processing plant, or a location where the product is delivered to a third party), they may reach different conclusions for different contracts, depending on the facts and circumstances.

Midstream entities need to evaluate the facts and circumstances of complex natural gas processing contracts (e.g., percentage of proceeds contracts, percentage of liquids contracts) to determine which party is the principal in the arrangement.⁵ Determining the nature of the promised specified good or service is critical. For example, a producer may sell the unprocessed commodity to a midstream natural gas gathering and processing entity. Alternatively, a producer may sell the processed commodity to an end customer and may purchase processing services from a midstream entity.

Illustration 1: Gas processing contract when control transfers to the midstream entity

A midstream entity enters into a contract with a producer and determines that it obtains control of unprocessed natural gas at the inlet of the processing plant. Assume the producer does not lease the processing facility. As a result, the midstream entity concludes that it has effectively purchased unprocessed natural gas from the producer.

The midstream entity then processes the natural gas and sells it to an end customer. Because the midstream entity obtained control of the natural gas, it is the principal in the transaction with the end customer. The midstream entity records product revenue for the sale of the commodity to the end customer. The transaction price is the amount the midstream entity charges the end customer for that commodity (i.e., the sales price of the processed natural gas). See the *Commodity sales contract* section below for accounting considerations for transactions when control of the commodity transfers to the midstream entity.

Illustration 2: Gas processing contract when control does not transfer to the midstream entity

A midstream entity enters into a natural gas processing contract that does not contain a lease and determines that it does not obtain control of unprocessed natural gas. The midstream entity concludes that it is acting as an agent on behalf of the producer and recognizes service revenue for processing services when they are performed. The midstream entity determines the transaction price based on the consideration paid by the producer to the midstream entity. See the *Service contracts* section below for accounting considerations for transactions when control of the commodity does not transfer to the midstream entity.

How we see it

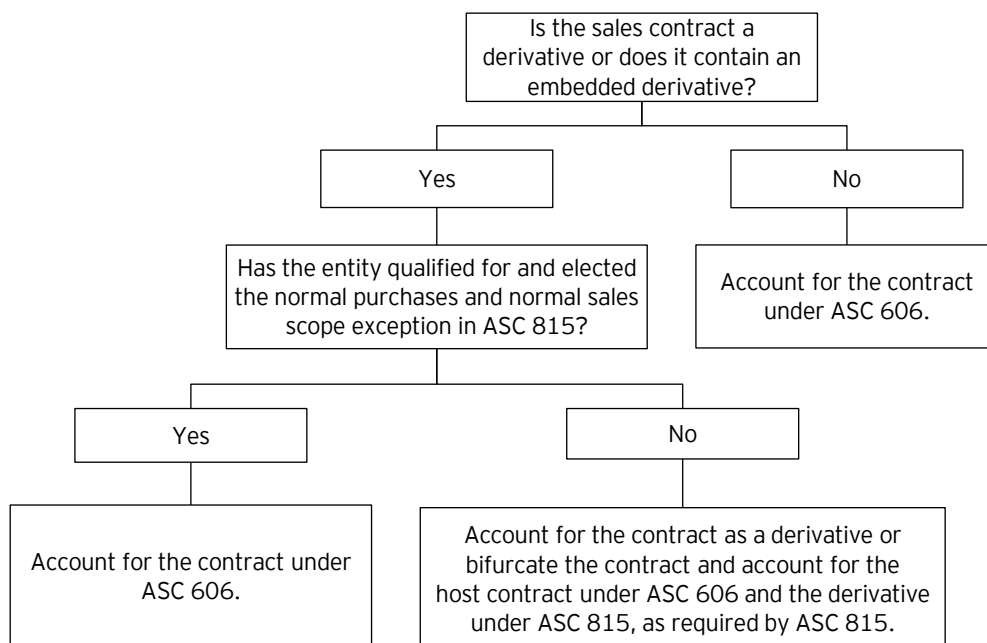
While the guidance on principal versus agent considerations is similar to legacy GAAP, the key difference is that Accounting Standards Codification (ASC) 606 focuses on control of the specified goods and services as the overarching principle for entities to consider when determining whether they are acting as a principal or an agent. This could result in entities reaching different conclusions than they did under legacy GAAP.

Commodity sales contracts

Scope considerations

Commodity sales contracts may meet the definition of a derivative or may contain embedded derivatives that may require bifurcation from the host contract with the customer. For example, derivatives may be embedded in fixed-price contracts or those in which the price is determined

based on the location where the customer obtains control of the commodity. The decision tree below summarizes the accounting treatment for sales contracts with customers that may be a derivative or may contain an embedded derivative:



Determining the number and nature of performance obligations (Step 2)

To apply the standard, an entity must identify the promised goods and services within the contract and determine which of those goods and services are distinct and therefore separate performance obligations. The Board noted in the Basis for Conclusions of ASU 2014-09⁶ that it developed the notion of a performance obligation to assist entities with appropriately identifying the unit of accounting for purposes of applying the standard. Because the standard requires entities to allocate the transaction price to performance obligations, identifying the correct performance obligation (i.e., the unit of accounting) is fundamental to recognizing revenue as the obligation is satisfied.

Midstream entities typically determine that, for each of their product sales contracts, each barrel of oil or thousand cubic feet (Mcf) of natural gas is distinct because it could be sold separately and is not dependent on or highly interrelated with the other barrels or Mcf. The standard then requires entities to evaluate whether the units are part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer. If they are, the units are accounted for as a single performance obligation under the series guidance. An entity's determination of whether a sales contract to deliver a commodity contains a single performance obligation for a series of distinct units or multiple performance obligations for each unit affects how it applies the rest of the revenue model.

In assessing whether each unit has the same pattern of transfer, an entity must determine whether each distinct unit meets the criteria to be recognized over time and has the same measure of progress. One of the over-time criteria that midstream entities will need to consider for these types of contracts is whether the customer simultaneously receives and consumes the benefits provided by the entity's performance as it transfers control of each barrel or Mcf to the customer (i.e., whether each of the distinct units meets the criteria to be recognized over time). In the Basis for Conclusions of ASU 2014-09,⁷ the Board observed that this over-time criterion would not apply if the entity's performance creates an asset that the customer does not immediately consume upon transfer (e.g., the customer holds an inventory of oil). Generally, midstream commodity contracts will have the same measure of progress.

Members of the Transition Resource Group for Revenue Recognition (TRG) generally agreed⁸ that a midstream entity should consider all facts and circumstances when evaluating whether a customer simultaneously receives and consumes the benefits of a commodity. These facts and circumstances may include the characteristics of the commodity (e.g., whether it can be stored), the contract terms (e.g., whether the entity provides a continuous supply to meet immediate demand) and information about the delivery mechanisms and other infrastructure. The following illustrates how a midstream entity might evaluate performance obligations in a commodity sales contract:

Illustration 3: Sale of gas to a customer that will store the product prior to usage

A midstream entity enters into a contract to sell 1,000 Mcf of gas to a customer that will store the product in its own tanks prior to usage. Because the customer will not consume the benefits of the commodity immediately upon receipt, the Mcf of gas being transferred would not meet the criteria to be accounted for as a single performance obligation under the series guidance. Therefore, each Mcf of gas would be considered a separate performance obligation under the contract.

Illustration 4: Sale of natural gas to a utility for use in a natural gas power plant

A midstream entity enters into a contract to supply a utility customer with natural gas for immediate consumption in a natural gas power plant. The customer will immediately receive and consume the benefits of this commodity. Therefore, the units of natural gas being transferred would meet the over-time criterion and have the same measure of progress, and would be accounted for under the series guidance as a single performance obligation (assuming the other series guidance criteria have been met).

In many cases, each unit of a commodity is a separate performance obligation.

Pricing considerations (Steps 3, 4 and 5)

Market- or index-based pricing (assuming the contract does not also include a lease)

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. Qualifying variable consideration is included in the transaction price. The standard requires an entity to estimate the amount of variable consideration to which it expects to be entitled and apply a constraint (see description of Step 3 in the Appendix). For a commodity contract that uses market- or index-based pricing, an entity needs to estimate and include in the transaction price the amount of variable consideration for which it is probable that a significant reversal in the cumulative amount of revenues recognized will not occur when the uncertainty related to the market- or index-based pricing is resolved. That is, an entity includes in the transaction price variable consideration to the extent it determines that it is probable that a significant reversal will not occur.

The standard provides an allocation exception (see the description of Step 4 in the Appendix) that allows an entity to allocate variable consideration (e.g., the market price) to one or more (but not all) performance obligations (i.e., the distinct commodities transferred in that period) if certain criteria are met, instead of using the relative standalone selling price method (see the description of Step 4 in the Appendix). Entities that qualify for this exception would apply it regardless of whether they determine that each barrel of oil or Mcf of gas is a separate performance obligation or part of a series of distinct goods or services that represent a single performance obligation. Most common commodity sales contracts with market- or index-based pricing terms satisfy the criteria for this allocation exception because the variable consideration relates specifically to an entity's efforts to transfer the distinct commodity units. Under the allocation exception, the midstream entity recognizes revenue in the period that control of the commodity (i.e., the distinct good or service) is transferred to the customer.

How we see it

Under ASC 606, we expect entities that have commodity sales contracts with market- or index-based pricing terms that apply the allocation exception noted above generally recognize the same amount of revenue at the same time as they did under legacy GAAP. In addition to analyzing the specific facts and circumstances, they also need to update their accounting policies, internal controls and other documentation to reflect the analysis required by ASC 606.

Fixed pricing

If an entity determines that a fixed-price commodity contract is in the scope of the revenue standard (i.e., the contract is not a derivative, the contract is a derivative but the entity has elected to apply the normal purchases and normal sales exception, or the contract includes an embedded derivative but the entity has bifurcated the host contract from the derivative), the entity will need to determine the standalone selling price of each performance obligation to allocate the transaction price to the performance obligations in the contract.

The standard states that the standalone selling price is the price at which an entity would sell a promised good or service separately to a customer. Entities should consider all information (including market conditions, entity-specific factors and information about the customer or class of customer) that is reasonably available to estimate the standalone selling price for each performance obligation. An entity must estimate that price if it doesn't have an observable price at which it sells the good or service separately in similar circumstances to similar customers.

When establishing pricing in fixed-price contracts, entities often consider gathering, processing and transportation costs (as well as other operating costs) and often price these contracts with a goal of protecting margins on the sales throughout the course of the contract without regard to fluctuations in forward index curves. As such, the forward index curve is not generally a key input used by entities in pricing multi-period fixed-price commodity contracts. If the forward index curve is not a key input to price these contracts, we do not believe it would be necessary to use the forward index curve to determine the standalone selling price of each commodity that will be transferred in a multi-period fixed-price commodity contract as the forward index curve would not represent an observable price pursuant to the standard (i.e., price of a good or service when the entity sells the good or service separately in similar circumstances and to similar customers). In such cases, the entity will need to determine whether the contracted price is representative of the standalone selling price of the commodity. This assessment will be particularly important when the fixed price varies over the contract term (e.g., there is a fixed rate per unit that decreases each period, but is applied to a consistent volume).

How we see it

Midstream entities need to evaluate whether the contracted price is representative of the standalone selling price of the commodity.

Service contracts

Service contracts with variable quantities

Midstream entities provide gathering, processing, transportation and storage services for upstream oil and gas entities. These contracts often involve variable quantities of goods or services.

A midstream entity must first determine whether the arrangement is or contains a lease. If a lease exists, the lease would be accounted for under ASC 840, *Leases*, or when an entity adopts the new guidance, ASC 842, *Leases*. When a contract contains a service element, a

midstream entity must determine the nature of its promise to the customer and the rights and obligations of the parties. That is, the midstream entity determines whether the nature of its promise is to transfer to the customer an overall service in which the variable quantity of goods or services results in variable consideration or to provide the customer with an option to purchase future goods or services. A midstream entity also should consider any makeup provisions in a contract when making this evaluation. The following table provides a framework to help midstream entities determine the appropriate accounting for contracts with variable quantities:⁹

Variable consideration	Customer option
<ul style="list-style-type: none"> ▶ The customer has previously entered into a contract that obligates the midstream entity to transfer the promised services. The future events (including the customer's own actions) that result in additional consideration occur after (or as) control of the services have (or are) transferred. ▶ The customer's actions do not obligate the midstream entity to provide additional distinct services. 	<ul style="list-style-type: none"> ▶ The customer has a present contractual right that allows it to choose the amount of additional distinct services that are purchased (that is, a separate purchasing decision). ▶ Prior to exercising the right, the midstream entity is not obligated to provide (and does not have a right to consideration for delivering) those services.

Illustration 5: Contract includes variable consideration

A midstream entity enters into a 10-year noncancelable contract with no options for extension. The midstream entity agrees to transport up to 50,000 Dekatherms of gas on a daily basis from point A to point B. The maximum daily quantity expires each day (i.e., any unused quantity cannot be carried forward and used in a subsequent period), and there is no option for additional volumes above the maximum. The midstream entity is obligated to hold capacity on its transportation pipeline for the customer each day up to the maximum daily quantity. The midstream entity is entitled to a reservation fee (charged daily regardless of the volumes transported) as well as a transportation fee (charged per Dekatherm transported).

The midstream entity concludes that the nature of the promise is a service of standing ready to accept volumes from the customer for transportation from point A to point B and the amount of service provided is variable. The midstream entity would then consider the applicability of the variable consideration exception (see the *Pricing considerations* section above for details). Contracts entered into by midstream entities can be complex, and entities should evaluate all terms to determine the appropriate accounting treatment.

Illustration 6: Contract that contains a customer option

A midstream entity enters into a five-year contract, cancelable by either party with 30-days written notice. The midstream entity agrees to transport up to 50,000 Dekatherms of gas on a daily basis, on an interruptible basis. That is, the midstream entity only agrees to transport the gas nominated by the customer if the midstream entity has available capacity. The midstream entity is entitled to a transportation fee (charged per Dekatherm transported).

The midstream entity concludes that this contract is an option to acquire transportation services because there are no enforceable rights and obligations until volumes are nominated by the customer and accepted by the midstream entity.

An entity needs to determine whether tiered pricing arrangements create variable consideration or options to acquire additional goods or services.

Tiered pricing

Service contracts for gathering, processing, transportation and storage may include tiered pricing structures with discounted prices that depend on the volume of hydrocarbons serviced during a specific period (e.g., one month, one year) referred to as the reset period. A midstream entity must first determine whether the contract includes variable consideration or options to acquire additional goods or services in the future (see the previous section).

As described in the *Commodity sales contracts* section, the standard provides an allocation exception that allows an entity to allocate variable consideration to one or more (but not all) performance obligations if certain criteria are met, instead of using the relative standalone selling price method. Tiered pricing contracts may meet the requirements to apply the allocation exception depending on the facts and circumstances of the contract. For example, when the reset period for a tiered pricing arrangement is relatively short (e.g., one day, one month), the entity may conclude that the contract meets the allocation exception rule for accounting for variable consideration. When making this assessment, a midstream entity should consider all information (including pricing of fixed-price contracts, market conditions, entity-specific factors and information about the customer or class of customer) that is reasonably available.

If the contract contains options for future goods or services, a midstream entity needs to assess whether these options to receive discounted pricing (based on the tiered pricing structure) for future volumes of hydrocarbons represent a material right (see Appendix for details). A material right is accounted for as a separate performance obligation.

Fuel allowances and usage provisions

Gas processing contracts may include a provision for remittance of a fixed percentage of processed product designed to compensate the midstream entity for product used to power the processing plant (commonly referred to as usage fees). Additionally, oil and gas transportation contracts may include charges in the form of fixed percentages of transported product to compensate for product lost in the transportation system.

Often, these provisions are designed to mirror actual usage or loss of product. Therefore, a midstream entity may determine that these provisions represent customer-provided materials rather than consideration under the revenue standard. When a midstream entity determines that a provision does represent consideration in the contract, the guidance for noncash consideration would be applied (see below).

Noncash consideration

In addition to fuel allowance and usage provisions, some midstream service contracts include payment terms that allow processing fees to be paid in-kind with processed natural gas liquids (NGLs) (commonly referred to as percentage of processing contracts). The processed NGLs represent noncash consideration under the standard. When an entity receives, or expects to receive, noncash consideration, the fair value of the noncash consideration at contract inception is included in the transaction price.

The fair value of noncash consideration could change both because of the form of consideration (e.g., a change in the market price of the NGLs an entity is entitled to receive from a customer) and for reasons other than the form of consideration (e.g., the volume or mix of processed NGLs). Under the standard, the variable consideration guidance applies only to variability resulting from reasons other than the form of consideration (e.g., there is uncertainty about whether the entity will receive the noncash consideration because it is contingent on a future event occurring or not occurring).

The standard requires noncash consideration to be valued at contract initiation. However, contracts that include significant variability may warrant further assessment. We believe a midstream entity that enters into a contract with noncash consideration that includes significant variability relating to all three of the following factors may measure the fair value of the noncash consideration at the point of processing:

- ▶ Price of the NGLs
- ▶ Mix of types of NGLs created during processing
- ▶ Volume of NGLs created during processing

Midstream entities need to carefully evaluate the facts and circumstances of their contracts to determine when variability is significant and relates to all three of these factors.

Take-or-pay or minimum volume commitments

Commodity sales contracts and some firm storage and transportation contracts can be structured as more complex take-or-pay or minimum volume contracts, which specify minimum product quantities a customer will pay for even if it chooses not to receive or use them. Product quantities that a customer elects not to take or use in the specified delivery period are referred to in the oil and gas industry as “deficiency quantities.” Some contracts prohibit customers from making up “deficiency quantities” in subsequent periods, while other contracts permit this practice.

Makeup period prohibited – If a customer cannot make up “deficiency quantities” in future periods, the entity fulfills its performance obligations and recognizes revenue for the contractually specified quantities as each delivery or service period expires. At inception, and at each subsequent reporting period, an entity must determine if it expects the customer to take the minimum volume. If the midstream entity expects the customer to make up all deficiencies (i.e., they expect the customer to take the minimum volume), the entity would recognize revenue as the product is transferred. Alternatively, if the midstream entity expects that there will be any “deficiency quantities” that the customer cannot or will not make up, it will apply a breakage model (see below).

Makeup period permitted – Some take-or-pay agreements or minimum volume contracts contain deficiency makeup periods that permit customers to acquire the commodity or service in a future period and make up contractually specified quantities of the commodity that they paid for but did not choose to receive in a prior period. If the customer can make up the deficiency quantities in future periods, the midstream entity has performance obligations to deliver those volumes at the customer’s request (subject to contractual and capacity constraints). At inception and at subsequent reporting periods, the midstream entity must estimate if it expects that there will be deficiencies that the customer will or will not make up. If the entity expects the customer will make up all deficiencies it is contractually entitled to, any consideration received relating to temporary deficiencies that will be made up in a future period will be deferred and the entity will recognize that amount when either of the following occurs:

- ▶ The customer makes up the volumes
- ▶ The likelihood that the customer will exercise its right for deficiency volumes becomes remote (e.g., there is insufficient capacity to make up the volumes, the makeup period expires)

Alternatively, if the entity expects the customer will not make up all deficient volumes, the midstream entity will apply the breakage model described below.

If the customer can make up the deficiency quantities in future periods, the midstream entity has performance obligations to deliver those volumes at the customer’s request.

In both of the cases described above, a midstream entity may collect nonrefundable payments from its customers for products that the customer has a right to receive in the future. However, the customer may ultimately leave that right unexercised (often referred to as breakage). If an entity expects to be entitled to breakage, the entity should recognize the expected breakage amount as revenue in proportion to the pattern of rights exercised by the customer. In estimating any breakage amount, an entity has to consider the constraint on variable consideration. That is, if it is probable that a significant revenue reversal would occur for any estimated breakage amounts, an entity should not recognize those amounts until the breakage amounts are no longer constrained. If an entity does not expect to be entitled to a breakage amount, it should not recognize any breakage amounts as revenue until the likelihood of the customer exercising its rights becomes remote. The entity must update its assessment of breakage each reporting period.

When determining the transaction price, the entity may need to evaluate whether the contract contains a significant financing component because of the timing difference between when it receives the consideration and when it transfers control of the goods to the customer. However, timing differences between the receipt of consideration and transfer of control of the goods that are due solely to the customer's deficiency quantities and the related makeup period likely will not give rise to a financing component. That is because the timing of the transfer of the commodity is at the discretion of the customer. If the difference is partially attributable to other causes, such as providing a customer assurance that the entity will complete its obligation under the contract, the entity may reach a different conclusion.

How we see it

When a contract provides a deficiency makeup period, midstream entities may be able to recognize revenue associated with deficiency volumes earlier under the revenue standard than they did under legacy guidance. Under legacy oil and gas industry guidance,¹⁰ entities typically waited for the deficiency makeup period to expire to recognize revenue from deficiencies. Under the breakage guidance in the revenue standard, an entity recognizes all or a portion of amounts associated with deficiency volumes before the makeup period expires if the entity determines that it is probable that the customer will not exercise all or some of its deficiency makeup rights. Entities may need to implement new processes and controls to update this assessment each reporting period.

Contributions in aid of construction

Contributions in aid of construction (CIAC) are common in many regulated and unregulated midstream gathering, processing and transportation agreements. Midstream entities typically receive these contributions as lump-sum payments from a customer, a potential customer or a noncustomer before construction activities begin or after the construction has been completed. Generally, the payments are intended to reimburse the midstream entity for actual costs incurred related to the construction of infrastructure such as a well connection, compressor or pipeline interconnect.

Scoping considerations

When evaluating whether CIAC arrangements are in the scope of the revenue standard, midstream entities may consider the following questions.

- ▶ **From whom is the CIAC received (i.e., a customer, a potential customer or a noncustomer such as a government)?** If the CIAC is received from a customer or a potential customer, this is an indicator that the midstream entity needs to further assess whether the CIAC may be subject to the revenue standard. Alternatively, if the CIAC is received from a noncustomer, this may be an indicator that the CIAC is outside the scope of the revenue standard.

- ▶ **Is there a contract (or anticipated contract) for service with the counterparty?** When there is a contract (or anticipated contract) for service with the counterparty, this is an indicator that the midstream entity needs to further assess whether the CIAC may be subject to the revenue standard.
- ▶ **If multiple contracts exist, should they be combined?** When a midstream entity and customer or potential customer enter into separate contracts for CIAC and subsequent services, this may be an indicator that the contracts need to be combined and analyzed as a single contract under the revenue standard.
- ▶ **Is the creation of the asset an output of the midstream entity's ordinary operations (i.e., is it common for the midstream entity to engage in the construction of assets for customers)?** When the construction of assets for customers is not part of the midstream entity's ordinary operations, the midstream entity may determine that the contract is outside the scope of the revenue standard.

Identification of performance obligations

If the contract is determined to be in the scope of the revenue standard, the midstream entity needs to determine whether the creation of the asset is a separate performance obligation. If the asset is determined to be a separate performance obligation, the entity allocates consideration to the performance obligations and recognizes revenue when or as control transfers. If it is not a separate performance obligation, the payment is likely a nonrefundable, up-front fee. The following questions should be considered when determining whether the creation of the asset is a performance obligation:

- ▶ **What promises are identified in the contract, and are they distinct?** A midstream entity needs to consider whether there is a promise to construct an asset for the counterparty and, if so, whether that asset is a separate performance obligation under the revenue standard. When making this assessment, an entity may consider:
 - ▶ **Does the asset transfer to the counterparty?** If the answer is yes, this may indicate that a distinct obligation exists that should be assessed as a separate performance obligation.

Other considerations when CIAC is determined to be revenue under the standard

Does the CIAC represent a significant financing component? When the receipt of consideration does not match the timing of the transfer of goods or services to the customer, an entity needs to consider whether a portion of the payment relates to financing either provided to or by the customer.

Illustration 7: CIAC arrangement with government entity

A midstream entity agrees to move a pipeline at the request of the government. The government pays the midstream entity consideration as reimbursement for costs incurred. The pipeline is owned by the midstream entity, and title will not transfer after the pipeline is moved.

In this case, the counterparty is a noncustomer (government), there are no anticipated future contracts and the asset does not transfer to the counterparty at the end of the construction. The midstream entity concludes this contract is outside the scope of the revenue standard and applies other applicable GAAP to account for this transaction.

Illustration 8: CIAC with a customer

A midstream entity enters into a 20-year processing contract with an upstream entity (customer). The contract also obligates the midstream entity to build a processing plant in a field where the upstream entity is planning to drill a series of new wells. The upstream entity agrees to pay the midstream entity an up-front fee to reimburse the midstream entity for the cost to build the processing plant (CIAC payment). Neither title nor control of the processing plant will transfer to the upstream company. The arrangement is not a lease. The midstream entity concludes that this arrangement is a contract with the customer in the scope of the revenue standard.

In evaluating this contract with a customer, the midstream entity must determine what promises it made in the contract and whether those promises are distinct and therefore separate performance obligations. The midstream entity would consider all relevant facts and circumstances, including that control of the plant does not transfer to the customer, and may conclude that the up-front fee (i.e., the reimbursement received to build the processing plant) does not represent a payment for the transfer of a good or service (i.e., the construction of the plant). In this case, the midstream entity includes the reimbursement as part of the consideration allocable to the promised goods or services in the contract (i.e., the processing services). The midstream entity must determine whether a portion of this fee represents a significant financing component (see Step 3 in the Appendix for details).

Entities likely will need to change systems and processes to prepare the required disclosures.

Disclosure requirements

The standard significantly increases the volume of interim and annual disclosures. For public entities, these disclosures include disaggregated revenues, qualitative and quantitative information about contracts with customers and significant judgments made in applying the standard and costs to obtain or fulfill a contract. Nonpublic entities can choose to provide the same or streamlined disclosures.

Some of the specific disclosure requirements that may affect midstream oil and gas companies include:

- ▶ Entities have to present separately contracts with customers subject to the standard from other sources of revenue on the face of the financial statements or in the notes to the financial statements. This includes both the revenue amounts and the related receivables. For example, entities must separately disclose the revenues and related receivables from commodity sales contracts accounted for under the revenue standard and those accounted for as derivatives under ASC 815 (e.g., index-based contracts entities have not elected to treat as normal purchases and normal sales), even if amounts were generated under the same contract with the same counterparty.
- ▶ Entities must evaluate whether separating different types of commodity sales contracts (e.g., by type of commodity, geographical region, type of contract) is appropriate to meet the disaggregation objective. Entities also have to reconcile any differences between this disclosure and segment disclosures. When determining the type of categories to use to disaggregate revenue, entities should consider how information about revenue has been presented for other purposes, including disclosures presented outside the financial statements and information reviewed by the chief operating decision maker for evaluating the performance operating segments.
- ▶ Entities must disclose how much revenue recognized in the current period is associated with previously fulfilled (or partially fulfilled) performance obligations. They may need to consider how this applies to adjustments that may be resolved in subsequent periods (e.g., quality adjustments, volume true-ups, changes in variable consideration associated with volume discounts, changes in estimated breakage).

- ▶ Entities also have to disclose the aggregate amount of the transaction price that is allocated to performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period. For example, if an entity estimates a total transaction price (after applying the constraint on variable consideration) of \$24 million and has recognized \$18 million to date, it discloses that \$6 million of the transaction price is yet to be recognized, along with either quantitative or qualitative information on when the remaining transaction price is expected to be recognized.

Entities can elect to use an optional exemption that allows an entity not to make quantitative disclosures about remaining performance obligations in certain situations, including when contracts have an original expected duration of less than one year and when an estimate of the transaction price is made solely for disclosure purposes. These situations also include: (1) when an entity applies the “right to invoice” practical expedient¹⁰ and (2) when variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation (i.e., a series of distinct goods or services) when certain criteria are met.

Entities that elect to use any of the standard’s optional exemptions that allow them not to disclose the aggregate transaction price allocated to the remaining performance obligations must disclose which optional exemption(s) they are applying, the nature of the performance obligations, the remaining duration of the contract and a description of the variable consideration that has been excluded from the disclosure (e.g., the nature of the variability and how that variability will be resolved).

How we see it

Preparing the required disclosures may require significant effort. Entities need to make sure that they have appropriate policies and procedures, systems and internal controls in place to collect and disclose the required information.

Endnotes:

- ¹ Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers*, as amended, was created by Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, and various amendments.
- ² ASU 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*.
- ³ ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instrument*.
- ⁴ Paragraph BC31 of ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*.
- ⁵ This discussion assumes that transactions involving the sale of a commodity do not qualify as a derivative under ASC 815 or are accounted for under the normal purchase and normal sales exception to derivative accounting. It also assumes that the processing contract with the midstream entity does not meet the definition of a lease under either under ASC 840, *Leases*, or ASC 842, *Leases*.
- ⁶ Paragraph BC85 of ASU 2014-09.
- ⁷ Paragraph BC128 of ASU 2014-09.
- ⁸ 13 July 2015 TRG meeting; agenda paper no. 43.
- ⁹ 9 November 2015 TRG meeting; agenda paper no. 48.
- ¹⁰ The FASB provided a practical expedient in ASC 606-10-55-18 for using an output method to measure progress toward completion of a performance obligation that is satisfied over time. If an entity demonstrates that the invoiced amount corresponds directly with the value to the customer of the entity’s performance completed to date, the practical expedient allows an entity to recognize revenue in the amount for which it has the right to invoice.

Appendix: The five-step revenue model and contract costs

The standard's core principle is that an entity recognizes revenue at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. That principle is applied using five steps that require entities to exercise judgment when considering the terms of their contract(s) and all relevant facts and circumstances. Entities have to apply the requirements of the standard consistently to contracts with similar characteristics and in similar circumstances. This table summarizes the new revenue model and the guidance for contract costs.

Step 1: Identify the contract(s) with the customer
<p>Definition of a contract</p> <p>An entity must first identify the contract, or contracts, to provide goods and services to customers. A contract must create enforceable rights and obligations to fall within the scope of the model in the standard. Such contracts may be written, oral or implied by an entity's customary business practices but must meet the following criteria:</p> <ul style="list-style-type: none"> ▶ The parties to the contract have approved the contract (in writing, orally or based on their customary business practices) and are committed to perform their respective obligations ▶ The entity can identify each party's rights regarding the goods or services to be transferred ▶ The entity can identify the payment terms for the goods or services to be transferred ▶ The contract has commercial substance (i.e., the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract) ▶ It is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer <p>If these criteria are not met, an entity would not account for the arrangement using the model in the standard and would recognize any nonrefundable consideration received as revenue only when certain events have occurred.</p> <p>Contract combination</p> <p>The standard requires entities to combine contracts entered into at or near the same time with the same customer (or related parties of the customer) if they meet any of the following criteria:</p> <ul style="list-style-type: none"> ▶ The contracts are negotiated as a package with a single commercial objective ▶ The amount of consideration to be paid in one contract depends on the price or performance of another contract ▶ The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation <p>Contract modifications</p> <p>A contract modification is a change in the scope and/or price of a contract. A contract modification is accounted for as a new contract separate from the original contract if the modification adds distinct goods or services at a price that reflects the standalone selling prices of those goods or services. Contract modifications that are not accounted for as separate contracts are considered changes to the original contract and are accounted for as follows:</p> <ul style="list-style-type: none"> ▶ If the goods and services to be transferred after the contract modification are distinct from the goods or services transferred on or before the contract modification, the entity should account for the modification as if it were the termination of the old contract and the creation of a new contract ▶ If the goods and services to be transferred after the contract modification are not distinct from the goods and services already provided and, therefore, form part of a single performance obligation that is partially satisfied at the date of modification, the entity should account for the contract modification as if it were part of the original contract ▶ A combination of the two approaches above: a modification of the existing contract for the partially satisfied performance obligations and the creation of a new contract for the distinct goods and services

Step 2: Identify the performance obligation(s) in the contract

An entity must identify the promised goods and services within the contract and determine which of those goods and services (or bundles of goods and services) are separate performance obligations (i.e., the unit of accounting for purposes of applying the standard). An entity is not required to assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract.

A promised good or service represents a performance obligation if (1) the good or service is distinct (by itself or as part of a bundle of goods or services) or (2) the good or service is part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer.

A good or service (or bundle of goods or services) is distinct if both of the following criteria are met:

- ▶ The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct)
- ▶ The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract)

In assessing whether an entity's promise to transfer a good or service is separately identifiable from other promises in the contract, entities need to consider whether the nature of the promise is to transfer each of those goods or services individually or to transfer a combined item or items to which the promised goods or services are inputs. Factors that indicate two or more promises to transfer goods or services are not separately identifiable include, but are not limited to, the following:

- ▶ The entity provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted
- ▶ One or more of the goods or services significantly modify or customize, or are significantly modified or customized by, one or more of the other goods or services promised in the contract
- ▶ The goods or services are highly interdependent or highly interrelated. In other words, each of the goods or services is significantly affected by one or more of the other goods or services in the contract

If a promised good or service is not distinct, an entity is required to combine that good or service with other promised goods or services until it identifies a bundle of goods or services that is distinct.

Series guidance

Goods or services that are part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer must be combined into one performance obligation. To meet the same pattern of transfer criterion, each distinct good or service in the series must represent a performance obligation that would be satisfied over time and would have the same measure of progress toward satisfaction of the performance obligation (both discussed in Step 5), if accounted for separately.

Customer options for additional goods or services

A customer's option to acquire additional goods or services (e.g., an option for free or discounted goods or services) is accounted for as a separate performance obligation if it provides a material right to the customer that the customer would not receive without entering into the contract (e.g., a discount that exceeds the range of discounts typically given for those goods or services to that class of customer in that geographical area or market).

Principal versus agent considerations

When more than one party is involved in providing goods or services to a customer, an entity must determine whether it is a principal or an agent in these transactions by evaluating the nature of its promise to the customer. An entity is a principal and therefore records revenue on a gross basis if it controls the specified good or service before transferring that good or service to the customer. An entity is an agent and records as revenue the net amount it retains for its agency services if its

role is to arrange for another entity to provide the specified goods or services. Because it is not always clear whether an entity controls a specified good or service in some contracts (e.g., those involving intangible goods and/or services), the standard also provides indicators of when an entity may control the specified good or service as follows:

- ▶ The entity is primarily responsible for fulfilling the promise to provide the specified good or service
- ▶ The entity has inventory risk before the specified good or service has been transferred to a customer or after transfer of control to the customer (e.g., if the customer has a right of return)
- ▶ The entity has discretion in establishing the price for the specified good or service

Step 3: Determine the transaction price

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. When determining the transaction price, entities need to consider the effects of all of the following:

Variable consideration

An entity needs to estimate any variable consideration (e.g., amounts that vary due to discounts, rebates, refunds, price concessions, bonuses) using either the expected value method (i.e., a probability-weighted amount method) or the most likely amount method (i.e., a method to choose the single most likely amount in a range of possible amounts). An entity's method selection is not a "free choice" and must be based on which method better predicts the amount of consideration to which the entity will be entitled. To include variable consideration in the estimated transaction price, the entity has to conclude that it is probable that a significant revenue reversal will not occur in future periods. This "constraint" on variable consideration is based on the probability of a reversal of an amount that is significant relative to cumulative revenue recognized for the contract. The standard provides factors that increase the likelihood or magnitude of a revenue reversal, including the following: the amount of consideration is highly susceptible to factors outside the entity's influence, the entity's experience with similar types of contracts is limited or that experience has limited predictive value, or the contract has a large number and broad range of possible outcomes. The standard requires an entity to estimate variable consideration, including the application of the constraint, at contract inception and update that estimate at each reporting date.

Significant financing component

An entity needs to adjust the transaction price for the effects of the time value of money if the timing of payments agreed to by the parties to the contract provides the customer or the entity with a significant financing benefit. As a practical expedient, an entity can elect not to adjust the transaction price for the effects of a significant financing component if the entity expects at contract inception that the period between payment and performance will be one year or less.

Noncash consideration

When an entity receives, or expects to receive, noncash consideration (e.g., property, plant or equipment, a financial instrument), the fair value of the noncash consideration at contract inception is included in the transaction price.

Consideration paid or payable to the customer

Consideration payable to the customer includes cash amounts that an entity pays, or expects to pay, to the customer, credits or other items (vouchers or coupons) that can be applied against amounts owed to the entity or equity instruments granted in conjunction with selling goods or services. An entity should account for consideration paid or payable to the customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service. However, if the payment to the customer exceeds the fair value of the distinct good or service received, the entity should account for the excess amount as a reduction of the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract

For contracts that have multiple performance obligations, the standard generally requires an entity to allocate the transaction price to the performance obligations in proportion to their standalone selling prices (i.e., on a relative standalone selling price basis). When allocating on a relative standalone selling price basis, any discount within the contract generally is allocated proportionately to all of the performance obligations in the contract. However, there are two exceptions.

One exception requires variable consideration to be allocated entirely to a specific part of a contract, such as one or more (but not all) performance obligations or one or more (but not all) distinct goods or services promised in a series of distinct goods or services that forms part of a single performance obligation, if both of the following criteria are met:

- ▶ The terms of a variable payment relate specifically to the entity's efforts to satisfy the performance obligation or transfer the distinct good or service
- ▶ Allocating the variable consideration entirely to the performance obligation or the distinct good or service is consistent with the objective of allocating consideration in an amount that depicts the consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer

The other exception requires an entity to allocate a contract's entire discount to only those goods or services to which it relates if certain criteria are met.

To allocate the transaction price on a relative standalone selling price basis, an entity must first determine the standalone selling price of the distinct good or service underlying each performance obligation. The standalone selling price is the price at which an entity would sell a good or service on a standalone (or separate) basis at contract inception. Under the model, the observable price of a good or service sold separately in similar circumstances to similar customers provides the best evidence of standalone selling price. However, in many situations, standalone selling prices will not be readily observable. In those cases, the entity must estimate the standalone selling price by considering all information that is reasonably available to it, maximizing the use of observable inputs and applying estimation methods consistently in similar circumstances. The standard states that suitable estimation methods include, but are not limited to, an adjusted market assessment approach, an expected cost plus a margin approach or a residual approach (if certain conditions are met).

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

An entity recognizes revenue only when (or as) it satisfies a performance obligation by transferring control of the promised good(s) or service(s) to a customer. The transfer of control can occur over time or at a point in time.

A performance obligation is satisfied at a point in time unless it meets one of the following criteria, in which case it is satisfied over time:

- ▶ The customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs
- ▶ The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced
- ▶ The entity's performance does not create an asset with an alternative use to the entity, and the entity has an enforceable right to payment for performance completed to date

The transaction price allocated to performance obligations satisfied at a point in time is recognized as revenue when control of the goods or services transfers to the customer. If the performance obligation is satisfied over time, the transaction price allocated to that performance obligation is recognized as revenue as the performance obligation is satisfied. To do this, the standard requires an entity to select a single revenue recognition method (i.e., measure of progress) that faithfully depicts the pattern of the transfer of control over time (i.e., an input method or an output method).

Licenses of intellectual property

The standard provides guidance on the recognition of revenue for licenses of intellectual property (IP) that differs from the model for other promised goods and services. The nature of the promise in granting a license of IP to a customer is either:

- ▶ A right to access the entity's IP throughout the license period (a right to access)
- ▶ A right to use the entity's IP as it exists at the point in time in which the license is granted (a right to use)

To determine whether the entity's promise is to provide a right to access its IP or a right to use its IP, the entity should consider the nature of the IP to which the customer will have rights. The standard requires entities to classify IP in one of two categories:

- ▶ **Functional:** This IP has significant standalone functionality (e.g., many types of software, completed media content such as films, television shows and music). Licenses of functional IP generally grant a right to use the entity's IP, and revenue for these licenses generally is recognized at the point in time when the IP is made available for the customer's use and benefit. This is the case if the functionality is not expected to change substantially as a result of the licensor's ongoing activities that do not transfer an additional promised good or service to the customer. If the functionality of the IP is expected to substantively change because of activities of the licensor that do not transfer additional promised goods or services, and the customer is contractually or practically required to use the latest version of the IP, revenue for the license is recognized over time. However, we expect licenses of functional IP to meet the criteria to be recognized over time infrequently, if at all.
- ▶ **Symbolic:** This IP does not have significant standalone functionality (e.g., brands, team and trade names, character images). The utility (i.e., the ability to provide benefit or value) of symbolic IP is largely derived from the licensor's ongoing or past activities (e.g., activities that support the value of character images). Licenses of symbolic IP grant a right to access an entity's IP, and revenue from these licenses is recognized over time as the performance obligation is satisfied (e.g., over the license period).

Revenue cannot be recognized from a license of IP before both (1) an entity provides (or otherwise makes available) a copy of the IP to the customer and (2) the beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the IP.

The standard specifies that sales and usage-based royalties on licenses of IP are recognized when the later of the following events occurs: (1) the subsequent sales or usage occurs or (2) the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied). This guidance must be applied to the overall royalty stream when the sole or predominant item to which the royalty relates is a license of IP (i.e., these types of arrangements are either entirely in the scope of this guidance or entirely in the scope of the general variable consideration constraint guidance).

Contract costs

ASC 340-40, *Other Assets and Deferred Costs – Contracts with Customers*, specifies the accounting for costs an entity incurs to obtain and fulfill a contract to provide goods and services to customers. The incremental costs of obtaining a contract (i.e., costs that would not have been incurred if the contract had not been obtained) are recognized as an asset if the entity expects to recover them. ASC 340-40 cites commissions as a type of incremental costs that may require capitalization. The standard provides a practical expedient that permits an entity to immediately expense contract acquisition costs when the asset that would have resulted from capitalizing these costs would have been amortized in one year or less.

An entity accounts for costs incurred to fulfill a contract with a customer that are within the scope of other authoritative guidance (e.g., inventory, property, plant and equipment, internal-use software) in accordance with that guidance. If the costs are not in the scope of other accounting guidance, an entity recognizes an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

- ▶ The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify
- ▶ The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future
- ▶ The costs are expected to be recovered

Any capitalized contract costs are amortized, with the expense recognized as an entity transfers the related goods or services to the customer. Any asset recorded by the entity is subject to an impairment assessment.