New revenue guidance
Implementation in the oil and gas industry under US GAAP

At a glance
Public companies must adopt the new revenue standards in 2018. Almost all companies will be affected to some extent by the new guidance, though the effect will vary depending on industry and current accounting practices. Although originally issued as a converged standard, the FASB and IASB have made slightly different amendments so the ultimate application of the guidance could differ under US GAAP and IFRS. This publication only includes guidance related to US GAAP.

The Revenue Recognition Transition Resource Group (TRG) has discussed various implementation issues impacting companies across many industries. These discussions may provide helpful insight into application of the guidance, and the SEC expects registrants to consider these discussions in applying the new guidance.

This publication highlights certain considerations and implementation challenges specific to oil and gas companies. The content in this publication should be considered together with our Revenue guide, available at CFOdirect.com.

Overview
Revenue recognition in the energy industry might appear to be simple. Revenue is generated through the sale of commodities or the performance of services in exchange for consideration. Complexities can arise, however, from certain types of contractual arrangements that are common in the industry, including arrangements between oil and gas producers and processors, and arrangements that include payments in the form of noncash consideration or variable consideration. The complexities in these areas can impact the measurement of revenue or timing of revenue recognition under the new revenue standard (ASC 606, Revenue from Contracts with Customers).

This publication focuses on how the new revenue standard will impact entities in the oil and gas industry and highlights potential differences from current practice under US GAAP. The examples and related discussions are intended to provide areas of focus to assist companies in evaluating the implications of the revenue standard.

This publication is organized into sections impacting individual subsectors of the oil and gas industry; however, some of the topics discussed in each section may be applicable to multiple subsectors.
Upstream considerations

Exploration and production activities are considered upstream operations. Exploration processes include the use of geologic science, drilling technology, and skilled personnel to find subsurface traps that contain hydrocarbons. Production is the activity that removes oil and gas resources from reservoirs.

Scope

The revenue standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, financial instruments, and certain nonmonetary exchanges. Extractive activities are not specifically excluded from the scope of the revenue guidance.

Normal purchases and normal sales
(also applicable to various subsectors)

Contracts for the purchase or sale of oil and natural gas often meet the definition of a derivative. However, contracts that are expected to result in physical delivery may be eligible for the normal purchases and normal sales (NPNS) scope exception included in ASC 815, Derivatives and Hedging.

Contracts that are accounted for as derivatives are excluded from the scope of the new revenue standard. If a company elects to designate a qualifying commodity sale contract as NPNS, we believe the contract should be accounted for under the new revenue standard. Refer to the section below on accounting for commodity sales under the new revenue standard.

Derivatives

Contracts that are accounted for as derivatives will continue to be subject to the guidance in ASC 815, including the disclosure requirements for derivative instruments (rather than the disclosure requirements in the new revenue standard). We believe that the ultimate settlement of a physically settled derivative accounted for as a derivative is also outside the scope of the revenue standard. The derivatives guidance does not specify income statement presentation for mark-to-market changes recognized on derivative instruments. Revenue from contracts with customers will need to be separately disclosed in the footnotes if mark-to-market changes and ultimate settlement of a derivative are presented as revenue on the income statement.

Arrangements between working interest owners

Because of economic uncertainties related to exploring for and producing oil and gas, two or more parties often join together to locate and develop prospects. Oil and gas companies will need to apply judgment to evaluate whether or not the parties in transactions between working interest owners have a vendor-customer relationship.

A customer is a party that contracts with a company to obtain goods or services that are the output of that company’s ordinary activities in exchange for consideration. Conversely, arrangements where the parties are participating in an activity together and share the risks and benefits of that activity are not considered contracts with customers.

A transaction with another working interest owner will be accounted for under the new revenue standard if the counterparty is considered a customer in the specific transaction. Companies should consider whether other applicable guidance (such as ASC 808, Collaborative Arrangements) should be applied when an arrangement is not a contract with a customer.

Example 1 - Working interest owners that are part of a joint operating agreement (JOA)

Facts: An upstream company is party to a JOA under which each of the parties agree to jointly participate in exploration and development activities to extract minerals.

Are the other JOA working interest owners customers for exploration and development activities?
Analysis: No. A JOA would not be considered a contract with a customer because the counterparties have contracted to share proportionately in the risks and benefits of the exploration, development, and production activities rather than to obtain the output of an entity's ordinary activities. Therefore, these activities would not be performance obligations performed for a customer.

Example 2 - Working interest owner that provides midstream services

Facts: An upstream company is a party to a JOA and also has wholly-owned midstream operations (such as gathering, processing, transportation, or marketing services). The upstream company performs midstream services for its own production and the production of the other working interest owners that are party to the JOA.

Are the other working interest owners customers in the midstream service contracts?

Analysis: Yes. We believe the working interest owners are customers in these arrangements because the upstream company is selling midstream services to the other working interest owners and the services are an output of the company's ordinary activities. Therefore, the midstream service contracts should be accounted for under the revenue standard.

Producer imbalances

A producer imbalance arises when one or more working interest owners sells a volume of production that is higher or lower than their entitled share of production for the period. The rights and responsibilities of the working interest owners regarding producer imbalances are typically included in a gas balancing agreement (GBA). A GBA is often attached as an exhibit to the JOA. However, some operating agreements do not contain GBAs, leaving the parties to agree upon an acceptable resolution for imbalances. Imbalances are ultimately settled in cash or in kind.

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<td>A company should account for its contracts with customers for commodity sales in accordance with the new revenue standard. Companies will also need to consider accounting for the imbalance as the existing SEC staff guidance on accounting for production imbalances will be rescinded with the adoption of the new revenue standard. Therefore, accounting for production imbalances is no longer an accounting policy election.</td>
<td>For imbalances that do not meet the definition of a derivative, companies may elect to account for imbalances using either the sales method or the entitlements method based on existing SEC staff guidance.</td>
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| Expected impact: | |
|-----------------| |
| Companies will recognize revenue for production sold to third-party customers based on the guidance in the revenue standard. In addition, companies will need to review the JOA and any gas balancing contracts between the working interest owners to determine the appropriate accounting for any production imbalances that occur. | |

Commodity sales

Sales of commodities are common in the oil and gas industry. Commodity arrangements that are not accounted for as derivatives are in the scope of the new revenue standard.
## Point in time versus over time
*(also applicable to midstream)*

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<td>Revenue is recognized upon the satisfaction of performance obligations, which occurs when control of the good or service transfers to the customer. Control can transfer at a point in time or over time. A performance obligation is satisfied over time if one of the following criteria is met:</td>
<td>Revenue is generally recognized when all of the following criteria are met:</td>
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<tr>
<td>● The customer simultaneously receives and consumes the benefits of the entity’s performance as the entity performs (e.g., certain services).</td>
<td>● Persuasive evidence of an arrangement exists</td>
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<td>● The entity’s performance creates or enhances an asset that the customer controls.</td>
<td>● Delivery has occurred or services have been rendered</td>
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<td>● The entity’s performance does not create an asset with alternative use to the entity and the entity has an enforceable right to payment (cost plus a reasonable profit margin) for performance completed to date.</td>
<td>● The seller’s price to the buyer is fixed or determinable</td>
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A performance obligation is satisfied at a point in time if it does not meet one of the criteria above. The revenue standard provide indicators for the point in time at which control transfers.

We believe many sales of oil and gas commodities will be recognized at a point in time under the new revenue standard as the customer does not simultaneously receive and consume the benefits of the commodity. However, there may be commodity arrangements that meet the “over time” guidance if the customer consumes the commodity immediately. For example, sales of natural gas to a gas fired power plant with no storage capacity may meet the “over time” criteria.

Companies should consider all relevant facts and circumstances when evaluating whether a commodity is simultaneously received and consumed by the customer. Considerations include the inherent characteristics of the commodity (e.g., whether it can be stored), the contractual terms of the arrangement, and other information about infrastructure or delivery mechanisms.

| Expected impact: | Companies typically recognize revenue when the commodity is delivered to the customer (assuming the other revenue recognition criteria have been satisfied). |

The determination of whether control transfers over time or at a point in time can have implications on other steps in the revenue model, including allocation of transaction price for multi-period commodity contracts and application of the “series” guidance, which requires that the commodities meet the criteria to be recognized over time.

## Allocating the transaction price
*(also applicable to midstream)*

### Fixed-price contracts

The transaction price is allocated to separate performance obligations based on their relative standalone selling prices, as determined at contract inception. Although the revenue standard does not require a specific method for determining
standalone selling prices, it does emphasize the use of observable data.

Companies should consider all available information (such as market factors, company-specific pricing practices, internal costs, classes of customers, availability of observable data, etc.) when establishing standalone selling prices. The forward price of a commodity may be a relevant input in determining standalone selling price in certain fixed price contracts. In other cases, the forward index curve may not be a key input used by a company in determining pricing for a commodity sale contract. For example, a company may price a long-term contract based on internal costs (e.g., depletion, lifting, and other operating costs) plus an expected profit margin, and there may not be an observable forward price for the duration of the contract. The forward price may not be a relevant input in determining standalone selling price in that situation. In these instances, a company will need to determine whether the contractually stated prices represent standalone selling price of the commodity. This determination may require judgment, particularly if the fixed price per unit is not constant throughout the term of the contract.

**Index-based contracts**

Certain commodity sale contracts include variable consideration because the consideration is calculated based on an index price at a specified date. Variable consideration is typically allocated to all of the performance obligations in an arrangement based on their relative standalone selling prices. However, if certain criteria are met, variable consideration is allocated to only one or more performance obligations in the contract rather than to all performance obligations. Sales of commodities at an index-based price will likely meet the criteria for allocating variable consideration, as illustrated with the example below.

**Example 3 - Standalone selling price for an index-based commodity sale**

**Facts:** Company enters into a contract to sell 100 barrels of oil each month for the next 12 months (a total of 1,200 barrels of oil) at an index-based price of WTI (West Texas Intermediate) for that day’s delivery. Company determines that each barrel of oil constitutes a separate performance obligation and control transfers at a point in time when the barrel of oil is delivered. Assume there are no prepayments or payments due after the deliveries.

How should Company recognize revenue under the revenue standard?

**Analysis:** The transaction price consists entirely of variable consideration. Under ASC 606-10-32-40, Company would allocate variable consideration to each barrel of oil based on the WTI price of that day since the variable consideration relates specifically to the company’s efforts to transfer the commodity and allocating the consideration in this manner is consistent with the allocation objective. Therefore, the amount of revenue recognized each day would be the product of the number of barrels delivered and the WTI price for that day.

**Income statement presentation of fees/deductions for transactions with gas processors**

Some arrangements between producers and processors are priced based on processed or refined product prices, less deductions for certain fees. For example, a processor may process and sell gas received from a producer and remit to the producer the proceeds from the ultimate processed commodity sales, less deductions for gathering, processing, treating, and other applicable fees.

We believe the producer’s income statement classification for these fees depends on whether the processor is a customer of or a service provider to the producer for that transaction. This assessment impacts whether the fees should be presented as a reduction of transaction price or as an expense in the producer’s financial statements. Determining if the processor is a service provider to or a customer of the producer may require judgment in certain circumstances. Producers will need to assess the nature of their arrangements and contractual terms to determine if they are selling commodities to or purchasing services from the processor. Refer to the below midstream section on arrangements between producers and processors.

**Midstream considerations**

Midstream processes provide a vital link between petroleum-producing regions and population centers where most end-users are located. Gathering and transmission pipelines are a significant part of the midstream petroleum industry.
Crude oil is typically moved by pipelines, trucks, barges, or tankers, while natural gas is moved by pipelines. Midstream operations also include gas processing activities.

**Contract inception date and contract term**

A company accounts for a contract with a customer when all of the following criteria are met:

- Contract has been approved and the parties are committed
- Each party's rights are identified
- Payment terms are defined
- Contract has commercial substance
- Collection is probable

A contract may be written, oral, or implied by the vendor's customary business practices. Generally, any agreement with a customer that creates legally enforceable rights and obligations meets the definition of a contract under the new guidance.

Contract inception date can impact the measurement date for noncash consideration, determination of transaction price, and disclosure of remaining performance obligations. An evaluation is required to determine, among other things, (1) the rights and obligations for each party on contract signing date and (2) whether cancellation terms exist. These aspects determine whether a contract exists and, if so, the contract term. A contract with general terms and conditions (e.g., a master service agreement or “MSA”) or an exclusivity contract may not create enforceable rights and obligations and therefore may not be a contract under the revenue standard.

Companies will need to implement systems and controls to identify the contract inception date for each of their contracts. They will also need to capture the market price as of contract inception for contracts that contain noncash consideration (however, see the discussion below on noncash consideration relating to gas processing services).

**Example 4 - Contract inception date for an interruptible transportation contract**

**Facts:** A midstream company enters into a contract to provide “interruptible” transportation if pipeline capacity is available. The customer must nominate volume prior to transportation each month and the company may or may not accept that nomination based on pipeline capacity. The customer does not commit to purchasing any minimum volume of transportation, and the midstream company is not obligated to perform any transportation services upon the initial contract signing date.

When does a contract exist, as defined by the revenue standard?

**Analysis:** A contract does not exist until the midstream company accepts the customer’s nomination each month. There is no contract beyond the current month of acceptance as there are no enforceable rights and obligations beyond that period of time. In addition, no disclosure would be required for future performance obligations on contract signing date because a contract does not exist until the company accepts the customer’s nomination each month.

**Example 5 - Contract inception date for a gathering contract**

**Facts:** A midstream company (a processor) enters into a gathering and processing agreement with a customer (a producer) under which the midstream company is obligated to gather and process all gas produced within the producer’s dedicated acreage. The customer must provide all gas produced within the dedicated acreage and the processor must make its gathering system and processing facilities available to the producer. In addition, there is a penalty for nonperformance if the producer does not deliver all produced gas within the dedicated acreage.

When does a contract exist, as defined by the revenue standard?

**Analysis:** A contract likely exists when the processor is obligated to make its facilities available to the customer, which may be contract signing date. At that time, there is an agreement between the parties that creates enforceable rights and obligations.
**Contract renewals**

Companies will need to determine the contract duration when the initial term has passed and the contract has turned “evergreen” (meaning the contract will continue until one party cancels). A contract for which the initial term has expired and automatically renews on a month-to-month basis is effectively a month-to-month contract (a one-month contract with a right to renew). The contract duration for the renewal periods is one-month as either party can cancel without penalty after each month. Similarly, a contract for which the initial term has expired and then the contract turns evergreen on a year-to-year basis would effectively be a one-year contract with a right to renew. Additional processes and controls may need to be developed to identify when a contract exists and the appropriate contract term for both accounting and disclosure purposes.

**Gas gathering and processing**

Midstream companies that perform gathering and processing activities enter into contracts with producers which can vary within each company and across companies. In certain contracts, the midstream company processes the natural gas for the producer and may also be involved in selling the commodity to a third-party purchaser. In other cases, the midstream company might purchase all of the gas from the producer.

**Principal versus agent considerations**

*(also applicable to upstream)*

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<td>Under the new revenue standard, a company is a principal in a transaction if it obtains control of the goods and services of another party before it transfers control of those goods and services to the customer. The revenue standard provides the following indicators to assist in the evaluation of whether a company controls the goods or services:</td>
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| - Primary responsibility for fulfilling the promise  
- Inventory risk  
- Discretion in establishing price |
| No relative weighting is provided to the indicators.  
Processors and producers will need to obtain an understanding of the relationships and contractual arrangements among the various parties in order to assess whether the processor obtains control of some or all of the commodities prior to their transfer to the end customer, or whether the processor is providing a processing service to the producer and selling the commodities on the producer’s behalf (i.e., as an agent). The pricing structure for these contracts (e.g., fee-based, percentage of proceeds, percentage of index, keep-whole, etc.) is not necessarily determinative in assessing whether the processor controls the commodities before they are transferred to the end customer. All facts and circumstances of an arrangement should be considered and judgment will often be required in making this determination. | Current guidance provides eleven indicators to determine whether gross or net reporting is more appropriate. Primary obligor and inventory risk are considered stronger indicators in the analysis. |

*Expected impact:*

Although the principal versus agent indicators in the new revenue standard are similar to those in the current guidance, the purpose of the indicators is different. A company is required to assess whether it controls the specified good or service, and the indicators are intended to support the control assessment. In contrast, current guidance is focused on assessing whether the company has the risks and rewards of a principal. Midstream companies will therefore need to reassess their arrangements through the lens of the control principle.

For some gas processing arrangements, it may be challenging to determine whether a contract with a producer is a purchase of a commodity or a service contract with a customer. Additionally, in certain contracts, the processor may be providing a service to the producer and purchasing some of the commodities (such as the natural gas liquids). These assessments should consider all facts and circumstances and include a careful review of the contractual terms.
**Gas purchase arrangements**

In some cases, the producer sells “wet” (unprocessed) gas to a processor and the processor obtains control of the commodity when it is received at the processing facilities (i.e., at the wellhead or a central delivery point). As a result, the processor is the principal in the commodity sale arrangement with the third-party customer. There is no service provided to the producer as the processor purchases all wet gas prior to processing the commodities. Gas purchase arrangements may include fees or deductions that reduce the amounts paid by the processor to the producer (e.g., processing fees, low volume fees, dehydration fees, transportation and fractionation (T&F), marketing, etc.). The processor would record these fees/deductions as a reduction of the purchase price for the commodities.

The producer would account for the contract with the processor based on the revenue guidance as the processor is its customer. Any fees/deductions should be presented as a reduction of the transaction price for the commodities (rather than as an expense) as the payment does not relate to a distinct service provided by the processor in this type of arrangement.

**Example 6 - Product purchase/sale**

**Facts:** Producer sells wet gas at the wellhead to a processor. Processor takes control of the commodity at the wellhead and may process, store, or sell the wet gas at its discretion. Processor enters into contracts with third parties for the sale of the processed gas (residue gas) and natural gas liquids (NGLs), provides the commodities directly to the third party customers, and negotiates any pricing discounts or premiums relative to the market index.

The price paid by Processor to Producer is 80% of the index price of the processed commodities at the time the gas is received, less a fixed gathering and processing fee per unit of gas received at the wellhead. These contracts are commonly referred to as “percentage of index” (POI) arrangements.

How should the parties account for this arrangement?

**Analysis:** Processor is the principal for the sale of the residue gas/NGLs to third-party customers and should recognize product revenue for the gross proceeds received. The 80% of the index price remitted to Producer should be recorded as product costs. The gathering and processing fees are a reduction of the purchase price of the commodity.

Producer should recognize product revenue in the amount received from Processor (who is its customer). The gathering and processing fees should be reflected as a reduction of the transaction price (rather than an expense) since Processor is not providing distinct services to Producer in exchange for those fees (as Processor purchased the gas at the wellhead).

**Gas processing service arrangements**

In other situations, a processor may be a service provider of the producer. The processor processes the gas for the producer and provides marketing services on behalf of producer, but does not take control of the commodities.

In these arrangements, the producer would record product revenue for the sale of the processed commodities to the third-party customers. Fees paid to the processor would be classified as expenses. The processor would recognize service revenue for the net fees retained for the processing and marketing services provided to the producer.

**Example 7 - Processing services**

**Facts:** Producer enters into a gas processing service contract with Processor. Producer retains title to the wet gas throughout processing. Processor remits the residue gas back to Producer and sells the NGLs to third-party customers.

Processor obtains legal title to the NGLs momentarily before legal title is transferred to a third-party customer as the NGLs are processed and sold on the same day. Processor is contractually required to sell the NGLs upon completion of the processing services in a specified location. Processor cannot store the NGLs or direct them to another location for sale. Processor retains 20% of the actual sales proceeds received for the NGLs as compensation for its services and remits 80% of the sales proceeds to Producer. Processor is also entitled to a fixed gathering fee per unit of gas received.
from Producer. These contracts are commonly referred to “percentage of proceeds” (POP) arrangements.

How should the parties account for this arrangement?

**Analysis:** Processor concludes that it does not obtain control of the NGLs before they are transferred to a third-party customer; therefore, Processor is selling the commodities on Producer’s behalf (i.e., as an agent). Additionally, Processor is providing the residue gas back to Producer. As such, Processor is providing processing and marketing services to Producer and should recognize service revenue for the net amount retained from the commodity sale (i.e., 20% of proceeds) and the fixed gathering fees.

Producer should recognize product revenue for the gross amounts received from the third-party customers for the residue gas and NGL sales. The fees paid to Processor (i.e., 20% of proceeds and fixed gathering fee per unit) should be reflected as expenses.

**Noncash consideration**

There are certain processing contracts in which the processor is performing a processing service for a producer (customer) in exchange for some of the physical commodity processed. For example, in a percentage of proceeds or percentage of liquids contract, a processor may retain a certain percentage of the processed gas and/or NGLs as compensation for its processing services. Under the new revenue standard, the retained commodity is noncash consideration received from the customer.

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<td>When noncash consideration is received for performing processing services, the fair value of the noncash consideration is included in the transaction price (i.e., included in service revenue). The subsequent sale of that commodity to a third party would be commodity revenue and commodity cost of sales.</td>
<td>Current practice is that companies generally do not record the processing revenue when receiving noncash consideration. Revenue is recorded once that commodity is sold to a third party, and is generally classified as commodity revenue without corresponding cost of sales.</td>
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**Expected impact:**

Companies will need to record service revenue based on the fair value of the commodities received as noncash consideration for processing services. There may be a change in reporting for companies that currently do not record processing revenue and commodity cost of sales for transactions in which they receive noncash consideration in exchange for services.

The revenue standard specifies that noncash consideration should be measured at fair value at contract inception. Changes in the fair value of noncash consideration that are due to the form of the consideration are not reflected in the transaction price. If there is variability due to both the form of the consideration and other reasons (e.g., variability based on the company’s performance under the contract), companies should apply the variable consideration guidance only to the variability resulting from reasons other than the form of the consideration.

In certain gas processing service contracts, it may be appropriate to measure the transaction price at the point in time when the volume, mix, and market price of the processed gas/NGLs are known, which will result in recognizing revenue based on the market price when the processing service is completed. This is appropriate in processing service contracts when the transaction price depends on the volume, mix, and market price determined upon completion of the service, and those variables are not specified in the contracts with the producers. In these situations, the variability associated with the “form of consideration” (market price) and reasons “other than form” (volume and mix) are interrelated to the midstream company’s processing services. This conclusion relates to a specific type of arrangement. It may not be acceptable to value noncash consideration at a date other than contract inception date in other fact patterns.
**Example 8 - Processing services with noncash consideration**

**Facts:** Processor performs services for Producer (a customer) in exchange for 30% of the y-grade yield (which refers to the mixed NGL stream extracted from the wet gas). This type of contract is commonly referred to as a “percentage of liquids” (POL) arrangement. Assume the y-grade is readily convertible to cash. The contract duration is 20 years. The volume and mix of commodities resulting from the processing service are not specified in the contract.

Is the y-grade yield received by Processor noncash consideration?

**Analysis:** Yes. The revenue standard does not make an exception to treat noncash consideration that is readily convertible to cash the same as cash consideration.

How should the noncash consideration (y-grade) be valued?

**Analysis:** The transaction price can be measured once the volume, mix, and market price of the y-grade becomes known (that is, as the processing services are completed). As such, service revenue will be measured based on the y-grade price as of date the processing service is complete. Since the quantity, mix, and value of noncash consideration is unknown at contract inception date and such variability is related to the services performed, we believe Processor may value the noncash consideration on the date these uncertainties are resolved.

**Transportation and other services**

Midstream companies provide various services to customers, such as transportation, storage, processing, or marketing services.

**Point in time versus over time**

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| Revenue is recognized upon the satisfaction of performance obligations, which occurs when control of the good or service transfers to the customer. Control can transfer at a point in time or over time. A performance obligation is satisfied over time if one of the following criteria is met:  
  - The customer simultaneously receives and consumes the benefits of the entity’s performance as the entity performs (e.g., certain services).  
  - The entity’s performance creates or enhances an asset that the customer controls.  
  - The entity’s performance does not create an asset with alternative use to the entity and the entity has an enforceable right to payment (cost plus a reasonable profit margin) for performance completed to date.  
A performance obligation is satisfied at a point in time if it does not meet one of the criteria above. The revenue standard provides indicators for the point in time at which control transfers.  
For example, transportation services would generally meet the criteria for overtime revenue recognition since the customer simultaneously receives the benefit of the | Revenue is generally recognized when all of the following criteria are met:  
  - Persuasive evidence of an arrangement exists  
  - Delivery has occurred or services have been rendered  
  - The seller’s price to the buyer is fixed or determinable  
  - Collectibility is reasonably assured  
For services arrangements not within the scope of guidance for construction or certain production-type contracts, revenue is recognized using the proportional performance model or completed performance model (i.e., when the product arrives at the destination).  
**Expected impact:**  
Midstream services will need to be assessed to determine whether revenue should be recognized over time as the service is provided or at a point in time upon completion of the service. This could result in an acceleration of revenue for companies that currently record revenue for certain services, such as transportation, upon completion of the service. |
transportation service as the company performs. The customer would benefit from the company’s performance as it occurs if another vendor would not need to substantially reperform the company’s performance to date (e.g., distance already travelled). Contractual or practical limitations that prevent the company from transferring the remaining obligations to another party are not considered in this assessment.

Example 9 - Transportation contract recognized over time

Facts: Company enters into a contract to transport 1,000 barrels of oil for Customer over the next month on Company’s pipeline. Customer cannot access the oil as it is being transported.

Should Company recognize revenue over time or at a point in time?

Analysis: Company should recognize revenue over time. Customer receives and consumes the benefits of Company’s performance as Company performs because another entity would not need to substantially reperform the work that Company completed to date. The fact that Customer cannot access the oil in the pipeline does not preclude revenue from being recognized over time. Company must select a measure of progress to recognize revenue over time (e.g., distance transported) that reflects the transfer of control to Customer.

Firm transportation

Firm transportation service is transportation service offered on a guaranteed, or “uninterruptible,” basis. Accordingly, firm transportation service typically includes two charges: (i) a reservation/demand charge related to how much of the pipeline’s capacity the customer reserves (maximum daily quantity), regardless of how much capacity is actually used; and (ii) a usage/commodity charge based on how much capacity is used.

Midstream companies should first evaluate whether such arrangements should be accounted for as leases rather than transportation services. If the arrangement is not a lease, the company should apply the guidance in the revenue standard to the arrangement.

Identifying the performance obligations

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<td>A company will need to assess, based on the nature of its promise, whether the arrangements contain optional purchases or usage-based fees (i.e., variable consideration). If the customer’s future actions are a separate buying decision to purchase additional distinct goods or services, the arrangement would contain an option to make purchases in the future. Firm transportation contracts generally contain a single performance obligation to provide firm transportation service for the duration of the contract, which is a “series” of daily distinct transportation services up to the maximum daily quantity (MDQ). Volumes above the MDQ may be considered optional purchases, as the midstream company is not obligated to provide transportation services above the MDQ.</td>
<td>Revenue is recognized when the transportation services are provided, which generally corresponds with the amount billed for each month of service.</td>
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<td>Companies must evaluate whether optional purchases provide the customer with a material right, which would be a performance obligation in the contract. The</td>
<td>Expected impact:</td>
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<td>Companies will need to assess whether optional purchases give rise to a material right, in which case a portion of the service revenue may need to be deferred until the option is exercised or expires.</td>
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evaluation of whether an option provides a material right requires judgment. If the additional volumes above the MDQ can be purchased at a discount that the customer would not receive without entering into the current contract, this option provides a material right within the contract. As such, a portion of the transaction price should be allocated to the material right at contract inception.

### Tiered pricing / volume discounts

Some midstream companies enter into agreements in which the fee for service changes based on the volume of services provided. These pricing terms may be referred to as “tiered pricing” or “volume discounts.” The period in which the volume discounts are earned and settled may vary from daily to over a period of multiple years.

Many services contracts will be considered a series of distinct services under the new revenue standard. These arrangements frequently include variable consideration based on the volume or quantity of service provided. Variable consideration is allocated to distinct goods or services in a series if the variable payment relates specifically to the company’s efforts to transfer the distinct good or service and the results are consistent with the allocation objective. If an arrangement includes volume-based pricing, allocating the variable fee to the period to which it relates may not be consistent with the allocation objective. This determination depends, in part, on whether the volume-based pricing resets each period or extends over multiple reporting periods.

### Reset within a reporting period

Certain volume-based pricing provisions may reset within a reporting period (i.e., daily, monthly, or quarterly). For example, an entity may provide gathering services where the fee per unit declines based on total volume gathered each day. The fee resets each day and the pricing terms are the same throughout the term of the contract. In this situation, the company should allocate the variable consideration to the distinct services within the series (that is, within that specific reporting period), since the variable payments relate specifically to the company’s efforts to satisfy the performance obligation and the results are consistent with the allocation objective. Similar pricing provisions may also be included in processing, storage, and other types of midstream service contracts.

### Example 10 - Tiered pricing that resets each month

**Facts:** Midstream company enters into a three-year non-cancelable gathering service contract in which Midstream will provide gathering services to Customer for $0.10 / Mcf for the first 10,000 Mcf and $0.05 / Mcf after 10,000 Mcf each month. The tiers reset each month. Midstream company concludes that the contract is comprised of a series of distinct daily gathering services.

How should Midstream allocate the transaction price in this arrangement?

**Analysis:** The transaction price is variable based on the volume gathered each month. Midstream would allocate the fee to the distinct daily service to which it relates, as the variable fee relates to Midstream’s performance and the results are consistent with the allocation objective of the revenue standard.

### Reset over multiple reporting periods

When volume discounts are earned over multiple reporting periods, companies may need to estimate the total transaction price (subject to the variable consideration constraint) at the beginning of each reset period. For example, a company may provide gathering services to the customer where the fee per unit of gas gathered declines based on total volumes processed during the year. In this case, it may not be appropriate to allocate the variable consideration to the distinct periods of service as the results may not be consistent with the allocation objective. The company would need to estimate the volume of gas to be gathered during the year and apply a single measure of progress to recognize revenue. The company should revise its estimates of variable consideration at each reporting date throughout the contract.
Cost reimbursements and fuel allowances

Some midstream contracts contractually require the customer to reimburse the company for certain out-of-pocket expenses, such as electricity used in providing services for the customer. Additionally, some contracts provide an allowance for certain product (i.e., fuel) which is consumed or lost in providing a service.

<table>
<thead>
<tr>
<th>New model</th>
<th>Current US GAAP</th>
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<tbody>
<tr>
<td>Out-of-pocket expense reimbursements, such as reimbursement for fuel expense (either in cash or commodity), may need to be assessed under the principal versus agent guidance in the revenue standard. Whether a company is acting as an agent or a principal depends on the facts and circumstances of the relationship and contractual terms between the parties, which can require significant judgment.</td>
<td>ASC 605-45 indicates that reimbursements received by the reporting entity for its out-of-pocket expenses should be characterized as revenue.</td>
</tr>
</tbody>
</table>

**Cash reimbursements:** Out-of-pocket reimbursements often relate to activities that do not transfer a good or service to the customer. For example, a midstream company that is entitled to reimbursement for electricity costs incurred in operating its processing plant would generally account for those electricity costs as costs to fulfill the processing service contract. Reimbursements would be included in the transaction price for the contract.

A company should consider the principal versus agent guidance if a customer reimburses the midstream company for a good or service that is transferred to the customer. For example, a midstream company may subcontract a portion of the service it provides (e.g., gathering, processing, treating, fractionating, or transportation services) and agree with the customer to be reimbursed for the subcontracted services. The midstream company would be an agent for the subcontracted services if it does not control the subcontracted services before they are transferred to the customer. In this case, the midstream company would recognize revenue from the reimbursement net of the amount it pays to the subcontractor. The midstream company would be the principal if it controls the subcontracted services by directing the subcontractor to perform on its behalf or combining the subcontracted services with its own services to create a combined output. If the midstream company is the principal, the reimbursement would be included in the transaction price and allocated to the separate performance obligations in the contract.

**Commodity reimbursements:** In some cases, a customer might contribute goods (such as a commodity) or services to facilitate a company’s fulfillment of a performance obligation. A company should include the customer’s contribution of goods or services in the transaction price as noncash reimbursement.

**Expected impact:**

Companies should assess whether cash reimbursements for out-of-pocket expenses represent reimbursements for the company’s fulfillment costs (i.e., the midstream company is the principal) or the customer’s costs (i.e., the midstream company is acting as an agent). Based on the principal versus agent guidance in the new revenue standard, which is based on control, companies may make a different determination as compared to current guidance on the presentation of cost reimbursements.

Companies should consider whether any product usage or loss allowances are intended to cover the actual usage or losses that occur as a result of the midstream company’s services in order to determine whether the allowances should be included in the transaction price.

In addition, as noted in the noncash consideration section, the measurement of the cost reimbursement may be different under the new revenue standard as compared to current practice if the reimbursement is in the form of noncash consideration and is included in the transaction price.
consideration only if the company obtains control of those goods or services. Companies must use judgment in determining if they obtain control over the commodity.

**Fuel usage and loss allowances:** Certain midstream service contracts contain fuel usage allowances and lost and unaccounted for (“LAUF”) provisions. The commodity (fuel) received in-kind in these service contracts does not represent part of transaction price as long as the contractually stated fuel allowance is intended to cover actual fuel usage or losses (e.g., historical fuel losses are consistent with the contractual fuel allowance percentage). In these situations, the reason for the provision of the fuel allowance is to facilitate the service provided to the customer or to allow for the natural losses (or “shrink”) that occurs in the gathering, processing, or transportation process. In other words, the intent of the allowance is to enable fulfillment of the contract rather than to provide compensation for services. As a result, the fuel allowance should not be included in service revenue.

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**Example 11 - Product loss allowance received in kind**

**Facts:** Midstream company enters into a transportation contract with a customer to provide natural gas transportation services. The contract provides a 5% product loss allowance to account for the natural shrink that occurs when transporting the gas through a pipeline, which is intended to cover actual losses that occur. On average, Midstream loses 4% - 6% of the product during the transportation process.

How should Midstream account for the product loss allowance?

**Analysis:** Midstream would determine the intent of the product loss allowance is to allow for the natural shrink that occurs when transporting gas through a pipeline and does not represent compensation for the transportation services. Therefore, the allowance does not impact the transaction price for the transportation services, and actual losses that occur (within the 5% allowance) would not be reflected as an operating cost of the company. If Midstream retains some excess natural gas (e.g., because it only loses 4% during transportation in a particular period) and subsequently sells the commodity to a third party, the sale would be recorded at that time. Midstream would present the proceeds from the sale as product revenue as it typically sells natural gas as part of its ongoing major or central operations.

**Oilfield services considerations**

Oilfield service companies provide a wide range of services to companies in the energy industry, specifically those who explore and produce oil and gas in the upstream sector. Many oilfield services contracts include long-term manufacturing processes and may include a service (installation or customization) along with the sale of products. The products and services may be delivered over a period ranging from several months to several years.
### Point in time versus over time

<table>
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<tr>
<td>Revenue is recognized upon the satisfaction of performance obligations, which occurs when control of the good or service transfers to the customer. Control can transfer at a point in time or over time.</td>
<td>Oilfield service companies typically follow the percentage-of-completion recognition model for construction of specialized equipment for customers.</td>
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<td>A performance obligation is satisfied over time if any one of the following criteria is met:</td>
<td><strong>Expected impact:</strong></td>
</tr>
<tr>
<td>- The customer simultaneously receives and consumes the benefits of the company’s performance as the company performs (e.g., certain services)</td>
<td>Entities will need to assess whether their arrangements meet the criteria in the new revenue standard for recognition of revenue over time. This could result in a change to the timing of revenue recognition as compared to current guidance. For example, some contracts might not specify a right to payment for performance completed to date at all times, or the right to payment might not include a reasonable profit margin, and the company may not be able to rely on relevant laws or regulations to establish an enforceable right to such payment. In those instances, revenue from such transactions may need to be recognized at a point in time rather than over time.</td>
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<td>- The company’s performance creates or enhances an asset that the customer controls</td>
<td></td>
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<tr>
<td>- The company’s performance does not create an asset with alternative use to the company and the company has an enforceable right to payment (cost plus a reasonable profit margin) for performance completed to date</td>
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<tr>
<td>A performance obligation is satisfied at a point in time if it does not meet one of these criteria.</td>
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<td>When oilfield service companies manufacture equipment for customers that does not have any alternative use (i.e., specialized equipment), the entity must also have an enforceable right to payment for performance completed to date in order to recognize revenue over time as opposed to a point in time. The payment amount would need to cover cost plus a reasonable profit margin. In addition to the terms of the contract, companies should consider relevant laws or regulations, such as legal precedent or customary business practice, which may or may not indicate that the entity has an enforceable right for payment for performance completed to date.</td>
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</table>
About PwC’s oil and gas practice

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PwC helps organizations and individuals create the value they’re looking for. We’re a network of firms in 157 countries with more than 223,000 people who are committed to delivering quality in assurance, tax and advisory services.

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