

Unbundling Basic Topics

ONRR Royalty Valuation – August 2022

Disclaimer

This presentation does not provide legal advice and should not be construed as stating ONRR's legal interpretation or position. Rather, this presentation serves as guidance for determining value for royalties and is not an appealable decision or order under 30 CFR Part 1290, Subpart B. This general guidance is based on examples and not a particular situation. While this message is not appealable, ONRR may use this guidance in conducting audits and as a basis for demanding additional royalties.

Housekeeping

- Please stay muted
- Raise hand to ask a question
  - Then unmute yourself
  - You can also ask questions in the chat

Polling Question 1

How does unbundling make you feel?

A. Excited

B. Curious

C. Anxious

D. Confused

E. Frustrated

Polling Question 2

How long have you been performing oil and gas royalty reporting?

A. 0 – 2 Years

B. 2 – 5 Years

C. 5 – 10 Years

D. Over 10 Years

Agenda

- What is Unbundling?
- Marketable Condition
- Allowances
  - Transportation
  - Processing
- ONRR Unbundling Cost Allocations
- Resources

What Is Unbundling?

- Unbundling is the process of taking gas transportation and/or processing fees and determining the ***allowed*** and ***disallowed*** costs for royalty reporting and payment.
- For training purposes, we will only discuss products recovered from processing gas production:
  - Residue gas, NGLs, condensate
  - Includes coalbed methane

Polling Question 3

How familiar are you with the Marketable Condition Rule?

A. Very familiar

B. Somewhat familiar

C. I have very little familiarity with this topic

D. This is my first exposure to this topic

Why Do We Unbundle?

- Marketable Condition Rule
  - The lessee must place gas in marketable condition and market the gas for the mutual benefit of the lessee and the lessor at no cost to the Federal Government.

Regs: 30 CFR 1206.146, 1206.174(h)

What Is The Marketable Condition Rule?

ONRR's Definition of Marketable Condition

- Marketable Condition is defined as "lease products which are sufficiently free from impurities and otherwise in a condition that will be accepted by a purchaser under a sales contract typical for the field or area."

Regs: 30 CFR 1206.20, 1206.171

Common Elements of Marketable Condition – Part 1

These elements of our marketable condition equation are defined:

- Compression: raising the pressure of the gas
- Gathering: the movement of lease production to a central accumulation or treatment point on the lease, unit, or communitized area; or a central accumulation or treatment point off the lease, unit, or communitized area that BLM or BSEE approves for onshore and offshore leases, respectfully, including any movement of bulk production from the wellhead to a platform offshore

Regs: 30 CFR 1206.20, 1206.171

Common Elements of Marketable Condition – Part 2

Marketability generally includes all processes that improve the salability of the product – functions that give the oil or gas its "value"

- Dehydration: removing water vapor from the product stream
- Sweetening: this step involves the removal or reduction of hydrogen sulfide (H_2S) and/or carbon dioxide (CO_2). These components are sometimes referred to as "acid gas" or "sour gas", and this process encompasses the removal of these items from the product stream

Gathering and Transportation

- Industry generally uses the term, “gathering” to mean any movement prior to the plant
- ONRR considers:
  - Gathering to be from the wellhead to the central accumulation point (CAP), which is the BLM or BSEE approved measurement point
  - Transportation to be everything from the CAP to the plant
    - Can be downstream of the plant as well

Transportation Versus Processing

- Transportation System: gas (unprocessed or residue) or gas plant products moved from the central accumulation point to the processing plant, which may include compression, mechanical separation, sweetening, and dehydration.
- Processing Plant: facility that extracts NGLs and may also contain inlet compression, sweetening, dehydration, and boosting compression.

Options For Unbundling

- Use an ONRR Unbundling Cost Allocation (UCA) if there is one applicable to your situation
- Come up with a ***reasonable*** unbundling method
- Take no allowances

How Do You Unbundle?

- You need to:
  - Determine marketable condition
  - Separate all fees
    - Transportation, processing, and fractionation
  - Determine the allowed portion of fees charged for: transportation, compression, sweetening, dehydration, processing, and fractionation
    - Gather information on transportation and processing facilities

Non-Arm's-Length

- Is the transportation or processing non-arm's-length?
- For unbundling, a lessee must use reasonable, actual costs – actual capital costs and actual operating costs
  - Separate them into transportation and processing costs
  - Determine the allowed and disallowed portions of those costs
  - Able to take an allowance from the transportation and processing costs to determine the royalty due

Regs: 30 CFR 1206.20 Definition "Affiliate" and "Arm's Length Contract"

Arm's-Length

- Is the transportation or processing arm's-length?
- For unbundling, a lessee must use reasonable, actual costs – contract charges
  - Determine allowed and disallowed portions
  - The lessee should only take allowances based on the allowed portion of the costs

ONRR Royalty Equation

Royalty Due = [volume x unit value x royalty rate] – [allowances x royalty rate]

Where does unbundling come in?

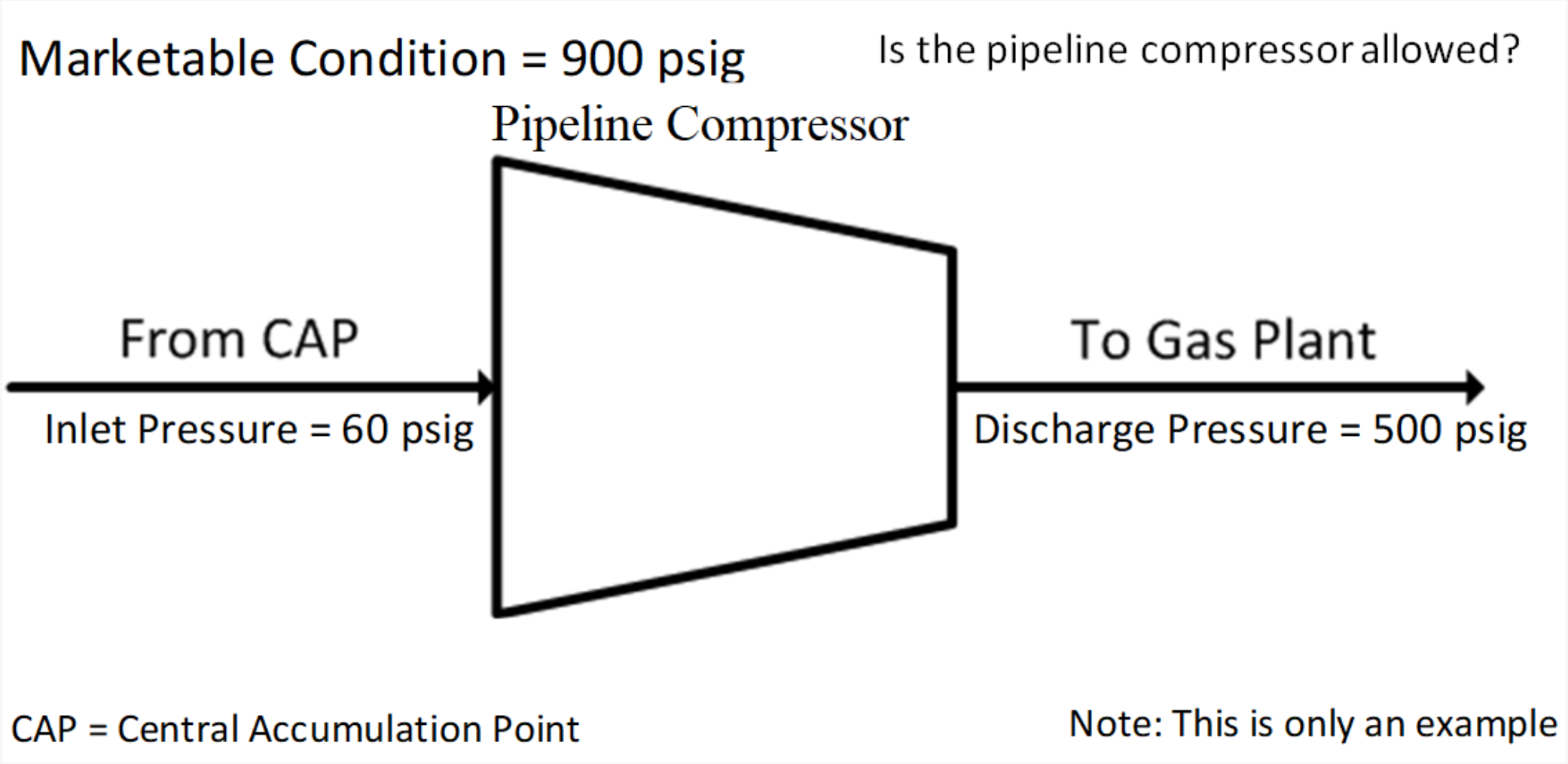
Allowances

- Allowances should not include any costs associated with marketing or placing the production into marketable condition
- Allowable transportation costs should be allocated across all the products being transported
- May not take an allowance for transporting or processing lease production that is not royalty-bearing

Transportation Allowances

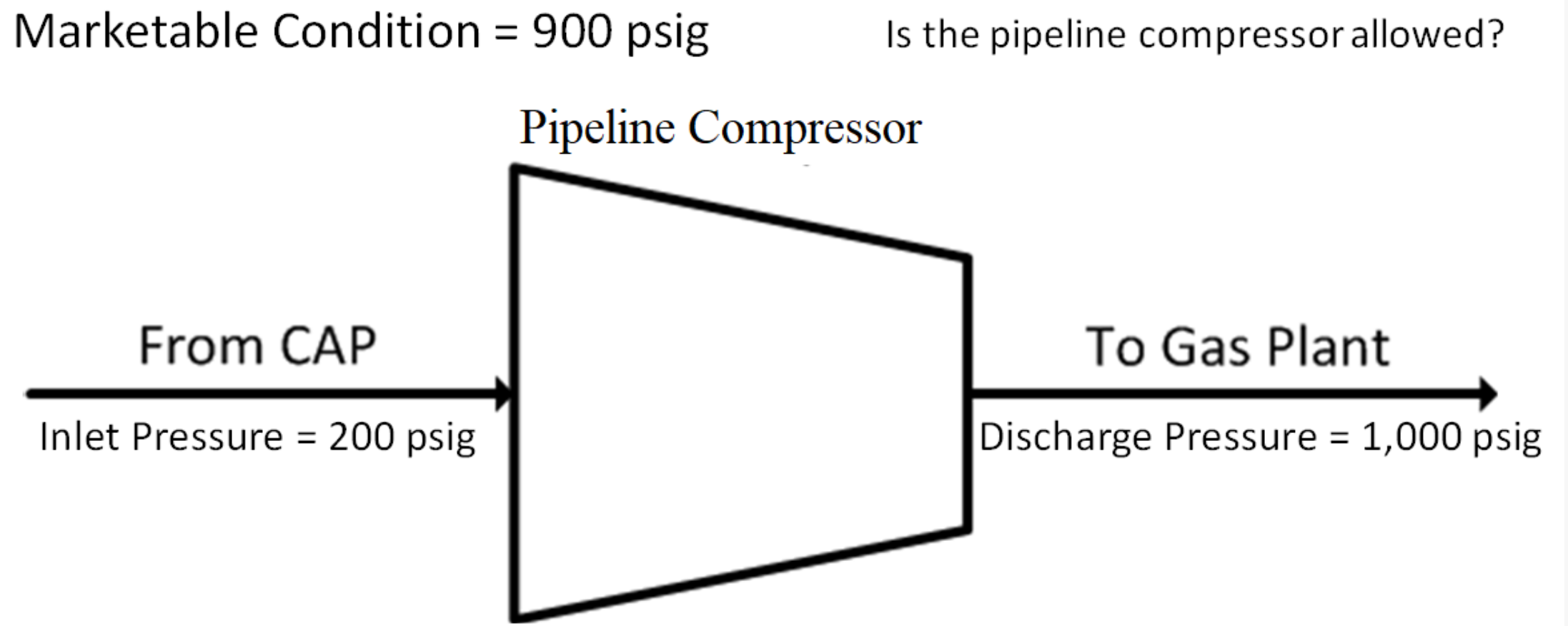
- Marketable condition applies
  - Cannot deduct compression, sweetening, or dehydration unless it exceeds marketable condition
  - A portion may be allowed if marketable condition is exceeded
  - Reminder transportation allowances cannot exceed 50% after January 1, 2017

Transportation Example #1



Example showing a pipeline compressor

Transportation Example #2



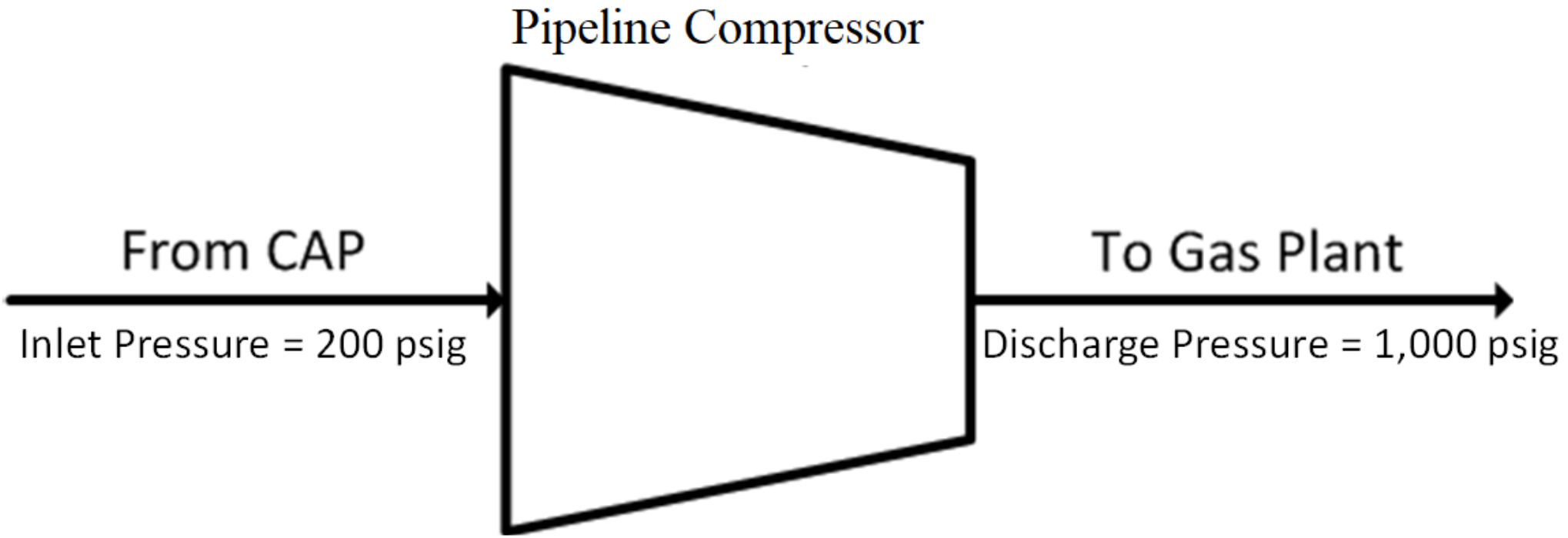
Gas production moving through 1 compressor

NOTE: This is only an example

Transportation Example #2 (cont'd)

Marketable Condition = 900 psig

Is the pipeline compressor allowed?

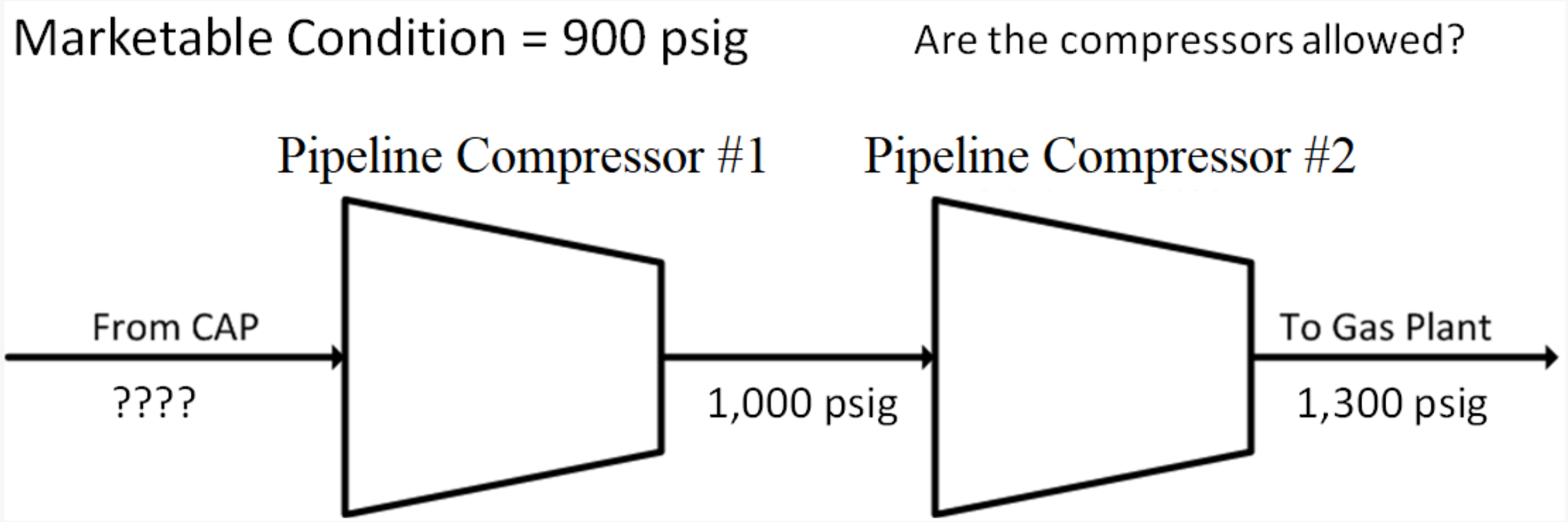


How much is allowed?

$$\frac{\text{Discharge Pressure} - \text{Marketable Condition}}{\text{Discharge Pressure} - \text{Inlet Pressure}} \times 100 = \frac{1{,}000 - 900}{1{,}000 - 200} \times 100$$

NOTE: This is only an example

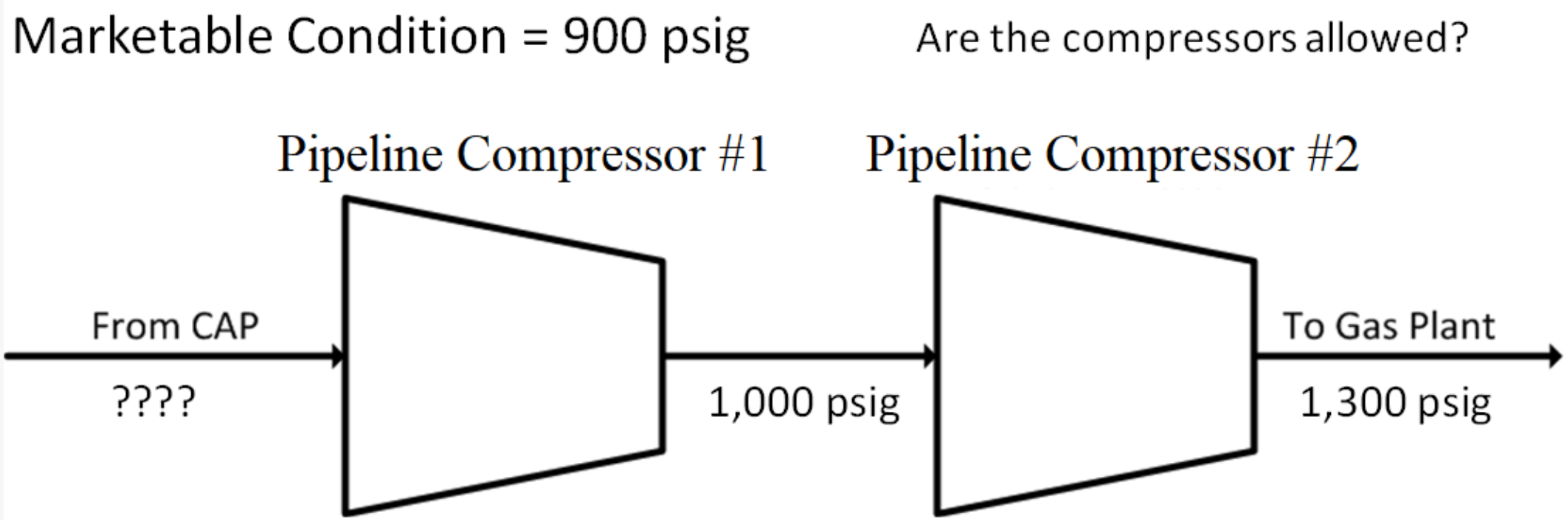
Transportation Example #3



Note: This is only an example

Gas production moving through 2 pipeline compressors

Transportation Example #3 (cont'd)



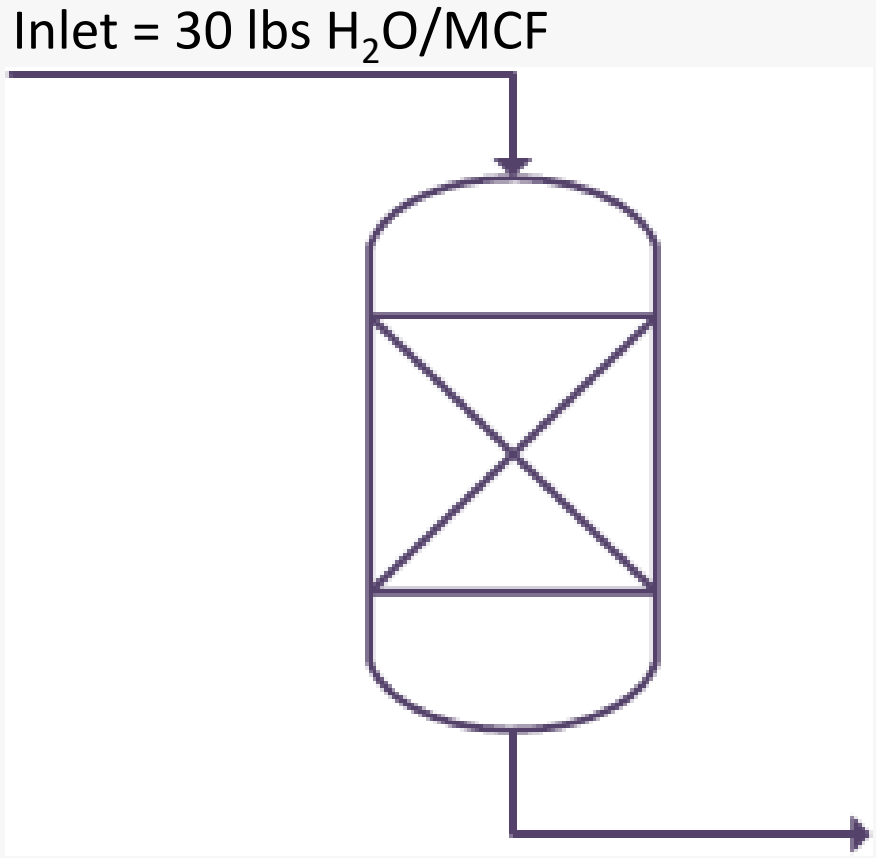
How much of compressor 1 is allowed?

$$\frac{\text{Discharge Pressure} - \text{Marketable Condition}}{\text{Discharge Pressure}} \times 100 = \frac{1{,}000 - 900}{1{,}000} \times 100$$

Note: This is only an example

Gas production moving through 2 pipeline compressors

Dehydration Example



Marketable Condition =
7 lbs H_2O/MCF

Is this dehydrator allowed?

Note: This is only an example

Gas production going through a dehydrator

Processing Allowances

Processing allowance means a deduction in determining royalty value for the reasonable, actual costs the lessee incurs for processing gas.

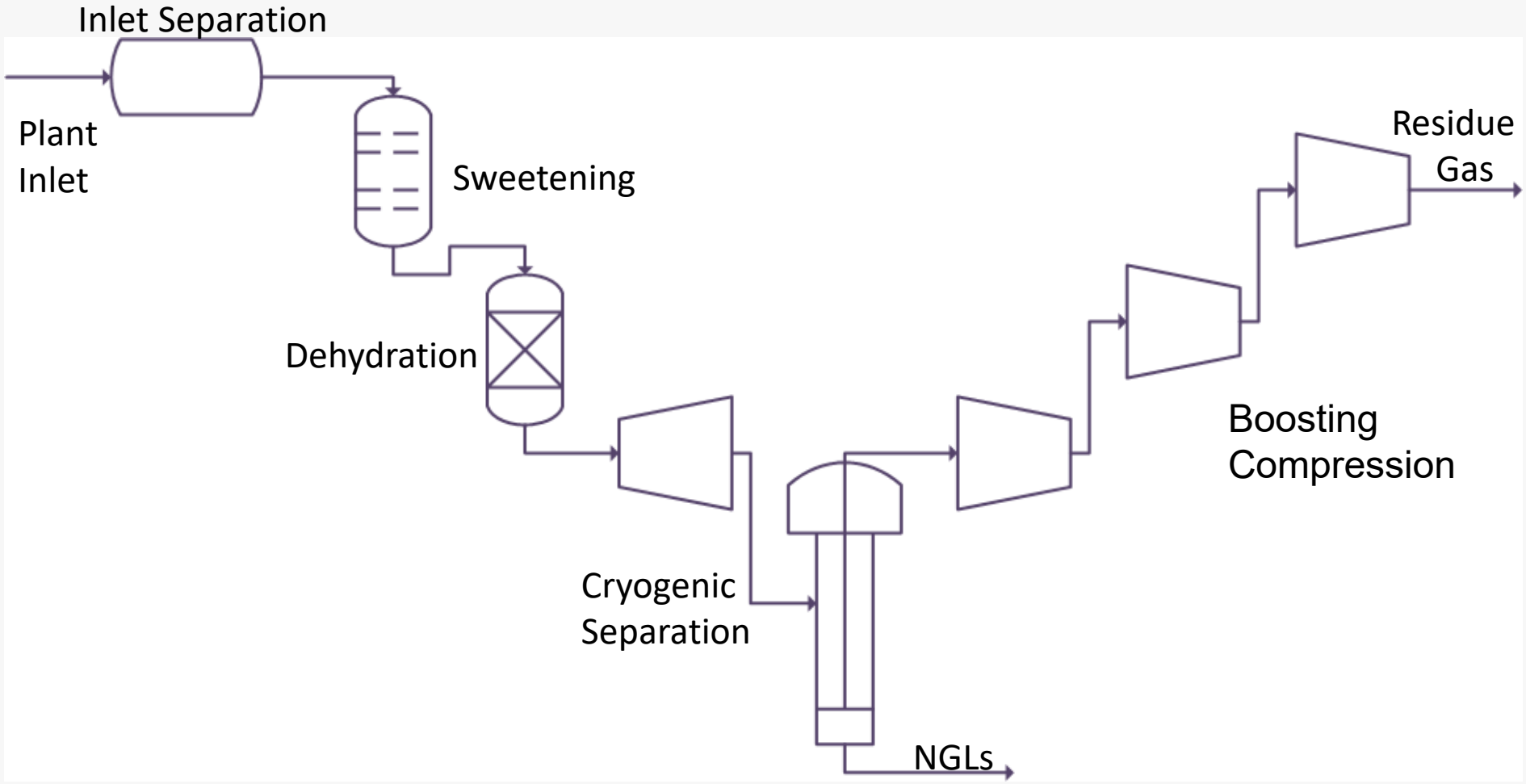
- After January 1, 2017, a lessee's processing allowance may not exceed 66 2/3%

Regs: 30 CFR 1206.20, 1206.171

Processing Plants

- May contain (but not limited to):
  - Inlet separation
  - Inlet compression
  - Condensate stabilization
  - Sweetening
  - Dehydration
  - Cryogenic/refrigeration separation
  - Boosting compression

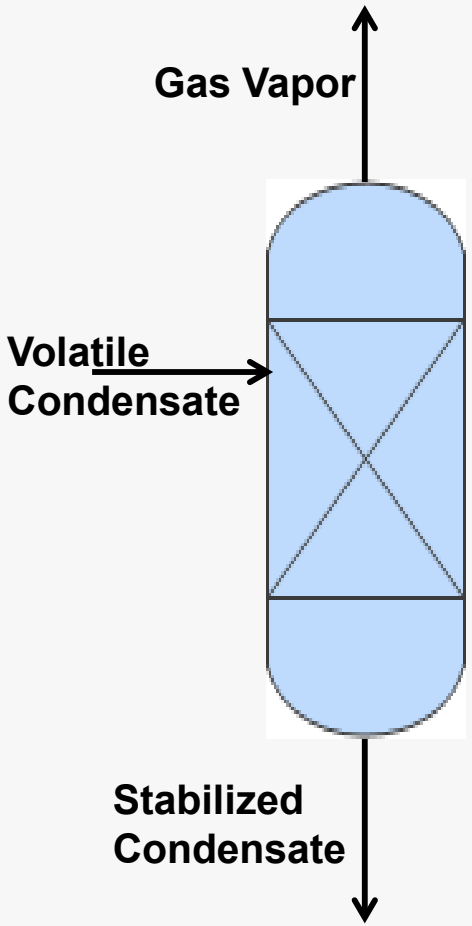
Processing Plant Diagram



NOTE: This is an example only

An example of a processing plant diagram

Condensate Stabilization



An example of a condensate stabilization unit

Condensate must be stabilized to meet the Reid Vapor Pressure (RVP) specification of a condensate pipeline or truck. This is a cost of placing the condensate into marketable condition and is also *not* deductible as a cost of processing.

Allowed Costs

- Refrigeration separation
- Cryogenic separation
- Lean Oil separation
- Joule Thomson units
  - Provided that the NGLs are marketed as NGLs

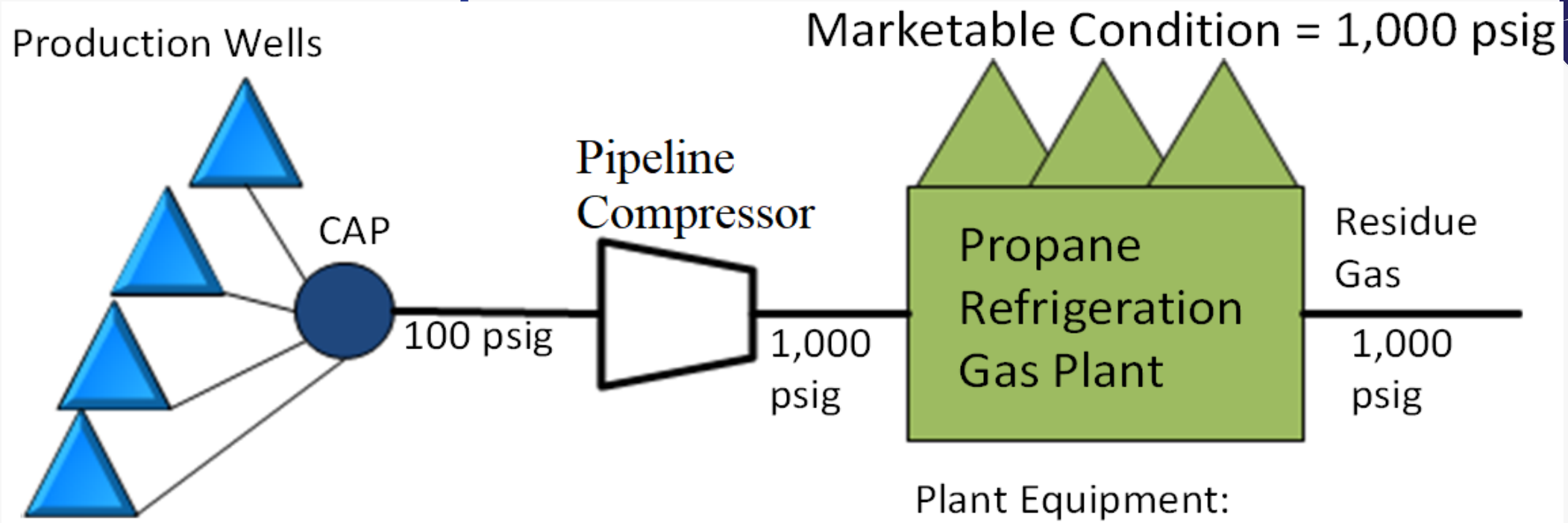
Disallowed Costs

- Mechanical separation
- Condensate stabilization
- Boosting compression

Costs Dependent On Marketable Condition

- Inlet compression
- Dehydration
- Sweetening

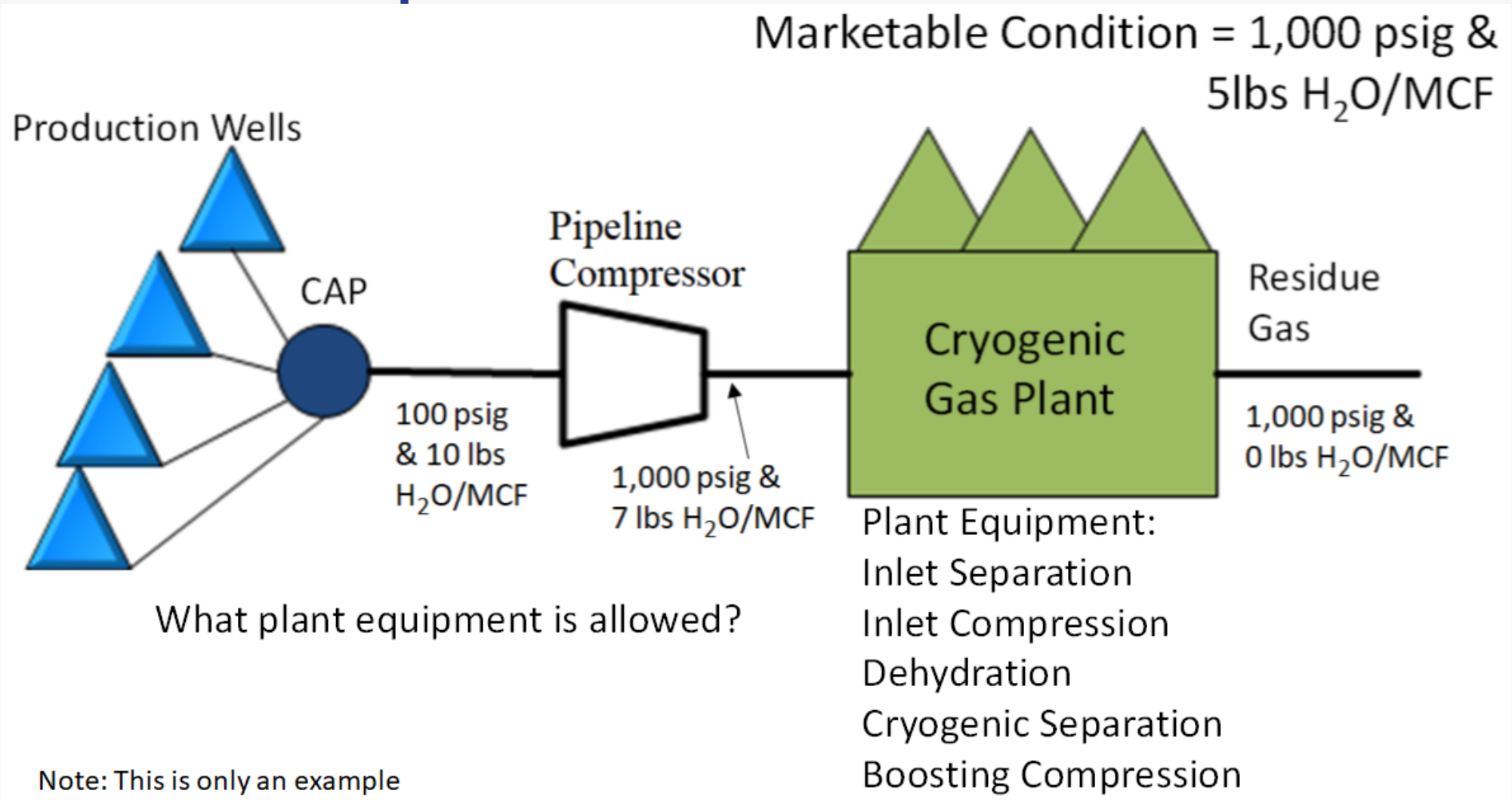
Plant Example #1



Note: This is only an example

Example showing gas production moving from wells through a compressor and a propane refrigeration gas plant

Plant Example #2



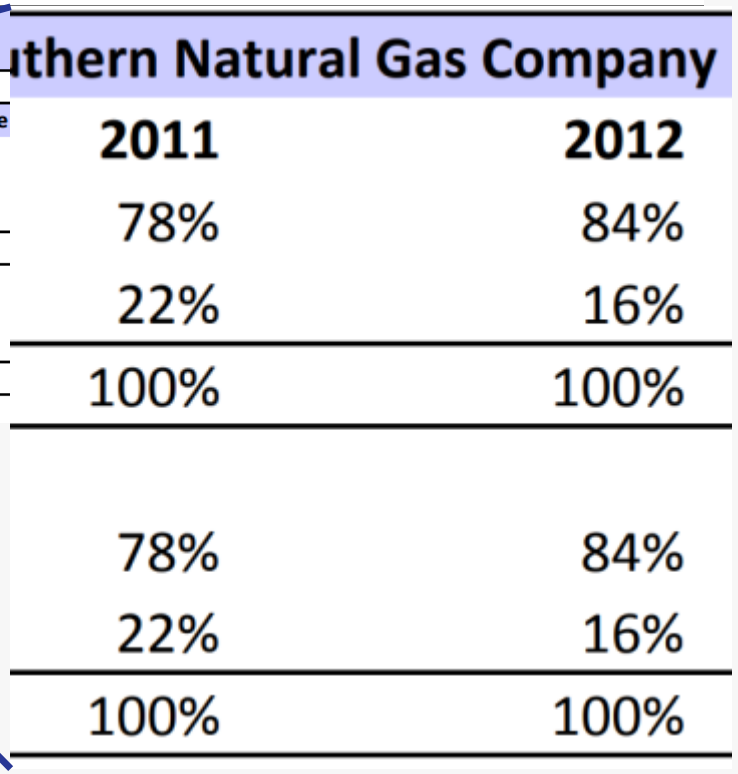
Gas production moving from wells to a CAP then a compressor before processing at a cryogenic gas plant

ONRR UCA – Toca Gas Plant

Toca Plant
COST ALLOCATIONS

	Toca Plant Cost Allocation - Gas delivered to the Southern Natural Gas Company and the			
YEAR	2009	2010	2011	2012
Allowed Costs	78%	78%	78%	84%
Disallowed Costs	22%	22%	22%	16%
	100%	100%	100%	100%
Fuel Allowed	78%	78%	78%	84%
Fuel Disallowed	22%	22%	22%	16%
	100%	100%	100%	100%

These UCAs are based on the most current information available (see "Disclaimer for ONRR Unbundling Website")



- Why does the allowed and disallowed UCA change from 2011 to 2012?

The Toca Gas Plant UCA from the ONRR.gov website showing 2011 allowed costs of 78% and in 2012 it changes to 84% allowed

Using an ONRR UCA

Description	Value or Percentage
NGL Sales Value	525,000
Total Bundled Processing Cost	70,000
Toca UCA Allowed	84%
Royalty Rate	16 2/3%

Royalty Due = [Volume x Unit Value x Royalty Rate] – [Allowances x Royalty Rate]

Total Bundled Processing Cost x UCA Allowed = Allowed Processing Cost
$70,000 x 84% = $58,800

Allowed Processing Cost x Royalty Rate = Total Processing Allowance
$58,800 x 16 2/3% = $9,800

NGL Sales Value x Royalty Rate = Royalty Value Prior to Allowances
$525,000 x 16 2/3% = $87,500

Royalty Value Prior to Allowances – Processing Allowance = Royalty Due
$87,500 - $9,800 = $77,700

ONRR.GOV/Unbundling

Office of Natural Resources Revenue
U.S. Department of the Interior

Revenue Data

Home | Reporting/Paying | Valuation | Indian Services | Compliance | About | Search ONRR.gov

Home / Unbundling Cost Allocations (UCAs)

Unbundling Cost Allocations (UCAs)

- Indian Gas Index Zone
- Indian Gas Major Portion
- Indian Oil Major Portion
- Federal Gas Index Option
- NYMEX Oil Prices
- Unbundling
- Valuation Regulations

Standardized UCAs

ONRR now provides simplified UCAs for certain gas plants and geographic locations, please see the Standardized UCA page for more information.

Specific Transportation System/Gas Plant UCAs:

ONRR also calculates UCAs for specific transportion systems and gas plants. See the table below for published UCAs.

How to use specific transportation system/gas plant UCAs

1. ONRR publishes UCAs for 2010.
2. You use 2010 UCAs to estimate 2011, 2012, and 2013.
3. ONRR publishes UCAs for 2011 and 2012.
4. You replace estimated values for 2011 and 2012 (there is no change for 2013).
5. You use 2012 (most current) UCAs for future reporting period estimates.

Show 10 entries Search Table:

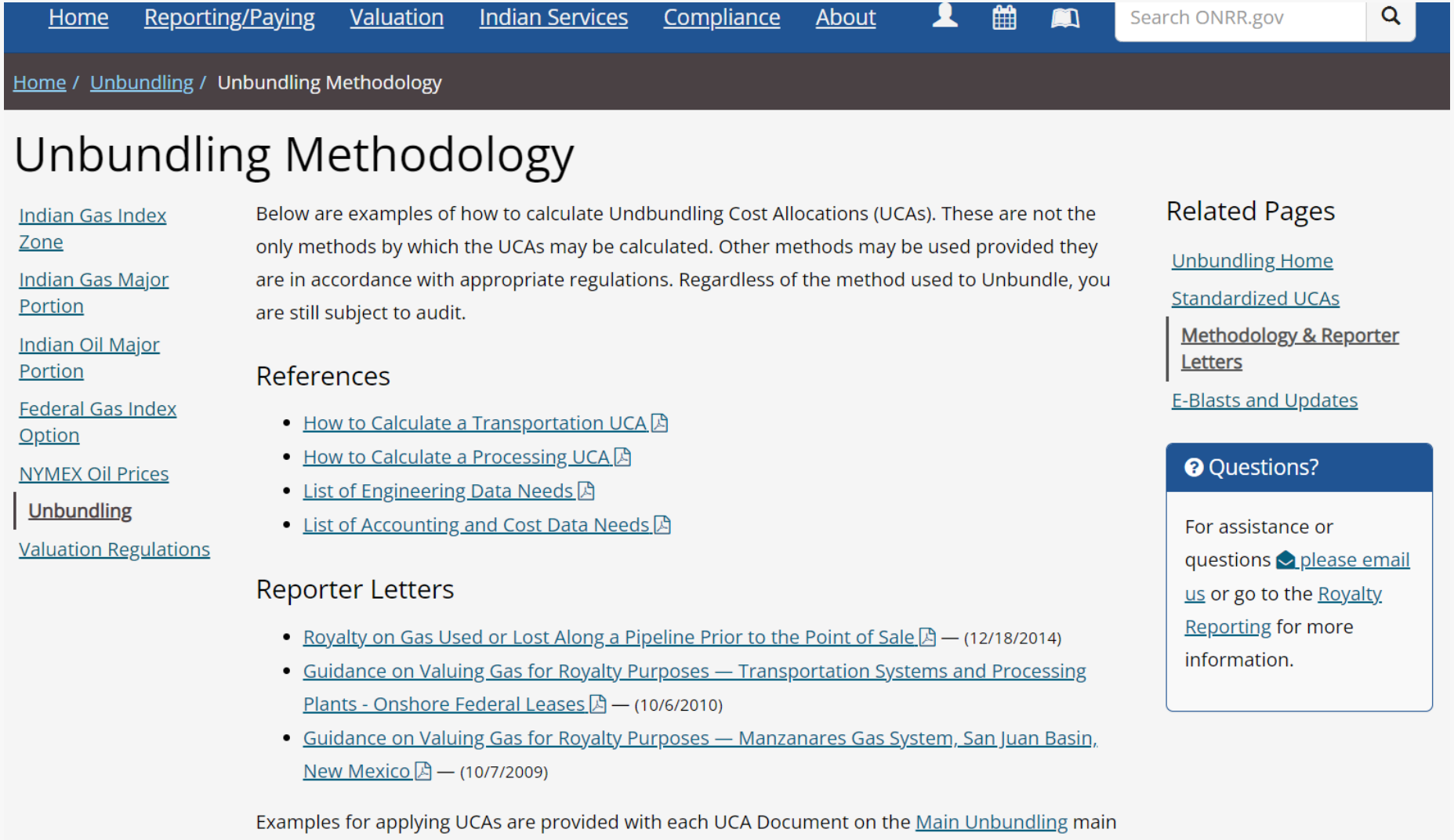
Related Pages

- Unbundling Home
- Standardized UCAs
- Methodology & Reporter Letters
- E-Blasts and Updates



ONRR Unbundling Home Page: https://onrr.gov/unbundling/index.htm

Resources



Home | Reporting/Paying | Valuation | Indian Services | Compliance | About | Search ONRR.gov

Home / Unbundling / Unbundling Methodology

Unbundling Methodology

- Indian Gas Index Zone
- Indian Gas Major Portion
- Indian Oil Major Portion
- Federal Gas Index Option
- NYMEX Oil Prices
- **Unbundling**
- Valuation Regulations

Below are examples of how to calculate Undbundling Cost Allocations (UCAs). These are not the only methods by which the UCAs may be calculated. Other methods may be used provided they are in accordance with appropriate regulations. Regardless of the method used to Unbundle, you are still subject to audit.

References

- How to Calculate a Transportation UCA
- How to Calculate a Processing UCA
- List of Engineering Data Needs
- List of Accounting and Cost Data Needs

Reporter Letters

- Royalty on Gas Used or Lost Along a Pipeline Prior to the Point of Sale — (12/18/2014)
- Guidance on Valuing Gas for Royalty Purposes — Transportation Systems and Processing Plants - Onshore Federal Leases — (10/6/2010)
- Guidance on Valuing Gas for Royalty Purposes — Manzanares Gas System, San Juan Basin, New Mexico — (10/7/2009)

Examples for applying UCAs are provided with each UCA Document on the Main Unbundling main

Related Pages

- Unbundling Home
- Standardized UCAs
- **Methodology & Reporter Letters**
- E-Blasts and Updates

Questions?

For assistance or questions please email us or go to the Royalty Reporting for more information.

ONRR Methodology & Reporter Letter Landing Page: https://onrr.gov/unbundling/methodology.htm

Standardized UCAs

Location	Technology	Standardized Plant UCA (Allowed)	Standardized Plant UCA (Disallowed)	Standardized Fuel UCA (Allowed)	Standardized Fuel UCA (Disallowed)	Publication Date	Example
San Juan Basin	N/A	42%	58%	31%	69%	9/13/2018	San Juan Basin Example
Green River Basin	N/A	52%	48%	55%	45%	9/13/2018	Green River Basin Example
Offshore (GOM)*	Cryogenic	65%	35%	25%	75%	10/18/2016	Cryo Example
Offshore (GOM)*	Lean-Oil	80%	20%	80%	20%	10/18/2016	Lean Oil Example

- Based on geographical area and gas plant technology
- Currently there are ones for:
  - Offshore
  - Greater Green River Basin
  - San Juan Basin

ONNR Standardized UCA Landing Page: https://onrr.gov/unbundling/offshore-uca.htm

Questions??

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