Fair Return and Value
Marketable Condition/Index Price Update
September 13, 2018

Updated Index Pricing Recommendation

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February, 2018 recommendation to pursue rulemaking for index pricing for federal gas

Utilized Indian approach as broad basis for this approach

Recommendation was created without consideration of other marketable condition factors

Updated approach incorporates specific elements of valuation as well as alternative index pricing approaches
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Recommendation

Pursue rulemaking to define Gas Index Pricing Option with a Marketable Condition Concept

Key factors to be addressed by this rule would be:

- The concept will have valuation options. The level of complexity will be determined by the design of the model.
- A standardized average single (per defined geographic area) price acceptable to both industry and DOI/ONRR
- Calculated (by ONRR) from generally accepted index price publications or other acceptable market-sensitive source
- Apply price to wellhead (or royalty measurement point) MMBTUs
- Incorporate reasonable geographically sensitive transportation deductions
- Apply price to all Federal gas sales types
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Background

- General support among Payors for Index Pricing concept
- Potential to resolve many Marketable Condition issues
- Index Price provision contained within repealed 2017 Federal Valuation Rule was not received well by Payors
  - The highest reported price was unachievable and reflected index points not representative of how the gas was actually marketed;
  - Transportation cost deductions were unreasonably low; and
  - The resulting price could only be used for non-arms-length sales type
Gas Index Pricing Options – August 2018

Hypothetical Producing Example

- 2,500 mcf BTU 1,080 = 2,700 mmbtu
- Royalty Measurement Point (RMP)
- Field Compression
- Gas Processing Plant
- Residue/Booster Compressor
- Mainline Pipeline ( Marketable Condition Point)
- System Throughput: 400 MMCF/d

Required Valuation Components

A. Market Index Price $3.75/mmbtu
B. Average Field Transportation ($0.35/mmbtu)
C. Average Disallowed System UCA: 55%
D. BTU Bump Factor (from Table, based on BTU) 4%
E. Simple Published Price (A - (B * (1 - C)) = $3.5925
F. Marketable Condition Standardized Cost Table (see below)

Note: All of the Required Valuation Components to the right plus the elements of the MC Cost Table must be calculated or negotiated by the RPC Team(s)

Valuation Options

1A. Simple ONRR Published Price With BTU Bump
   Formula: Volume X E X (1.0 + Bump)
   2,700 X $3.5925 X 1.04 = $10,087.74
   X .125 Royalty Rate
   $1,260.97 ONRR Royalty

1B. Simple Industry Calculated Price With BTU Bump
   Formula: Volume X (A - (B X (1-C) X (1.0 + Bump))
   2,700 X ($3.75 - ($0.35 X 0.45)) X 1.04 = $10,087.74
   X .125 Royalty Rate
   $1,260.97 ONRR Royalty

2. Calc’d Price using Standardized Table w/ Bump
   Formula: Volume X (A - (B - F) X (1.0 + Bump))
   2,700 X ($3.75 - ($0.35 - $0.16)) X 1.04 = $9,996.49
   X .125 Royalty Rate
   $1,249.56

Optional

Gross Proceeds
Calculate value and allowances per current regulations