take a closer look

Midstreamer vs Producer Perspective on Joint Facilities

Rein Evelein | Joint Interest Representative

Calgary | November 10 | 2011

encana™ natural gas

Potential Producer Arrangements with Midstreamer

- Three Types of Arrangements Recently Completed by Encana
  - Fee for Service for a New Midstream Facility
    - Relatively Easy to Complete
  - Midstreamer and Producers Share in New Facility
    - New CO&O Required
    - Significantly Complex and Hard to Complete
  - Midstreamer and Producers Expand an Existing Facility
    - Have to Work with Existing CO&O
    - Very Complex and Very Hard to Complete

Understanding the Drivers

- **Simple Illustrative Example of Revenue, Costs and Netback**

Revenue - Gas	$4.00
- Liquid Uptick	$2.00
Total Revenue	**$6.00**
Royalties (25%)	$1.50
Fee - Capital	$0.70
Fee - Op Cost	$0.20
Field Costs	$0.40
Netback	**$3.20**

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Midstreamer Gets

Producer Gets

Common Issues that Need Addressing in Building or Revising a CO&O

- **Owner Substances**
  - Typically, Sources of Gas Owned by an Owner
  - Midstreamer, as Owner, does not “own” gas
- **Streaming Rights**
  - Midstreamer wants to Fill its WI Capacity first
    - Only Source of Revenue, Needs Return on Capital
  - Producer wants Share of 3rd Party Fee Revenue through Excess Pool
- **Capital vs Operating Costs**
  - Midstreamer wants to Minimize Capital as much as possible
    - Costs recovered as Op Cost recovered in 1 year
  - Producer, of course, wants the Opposite

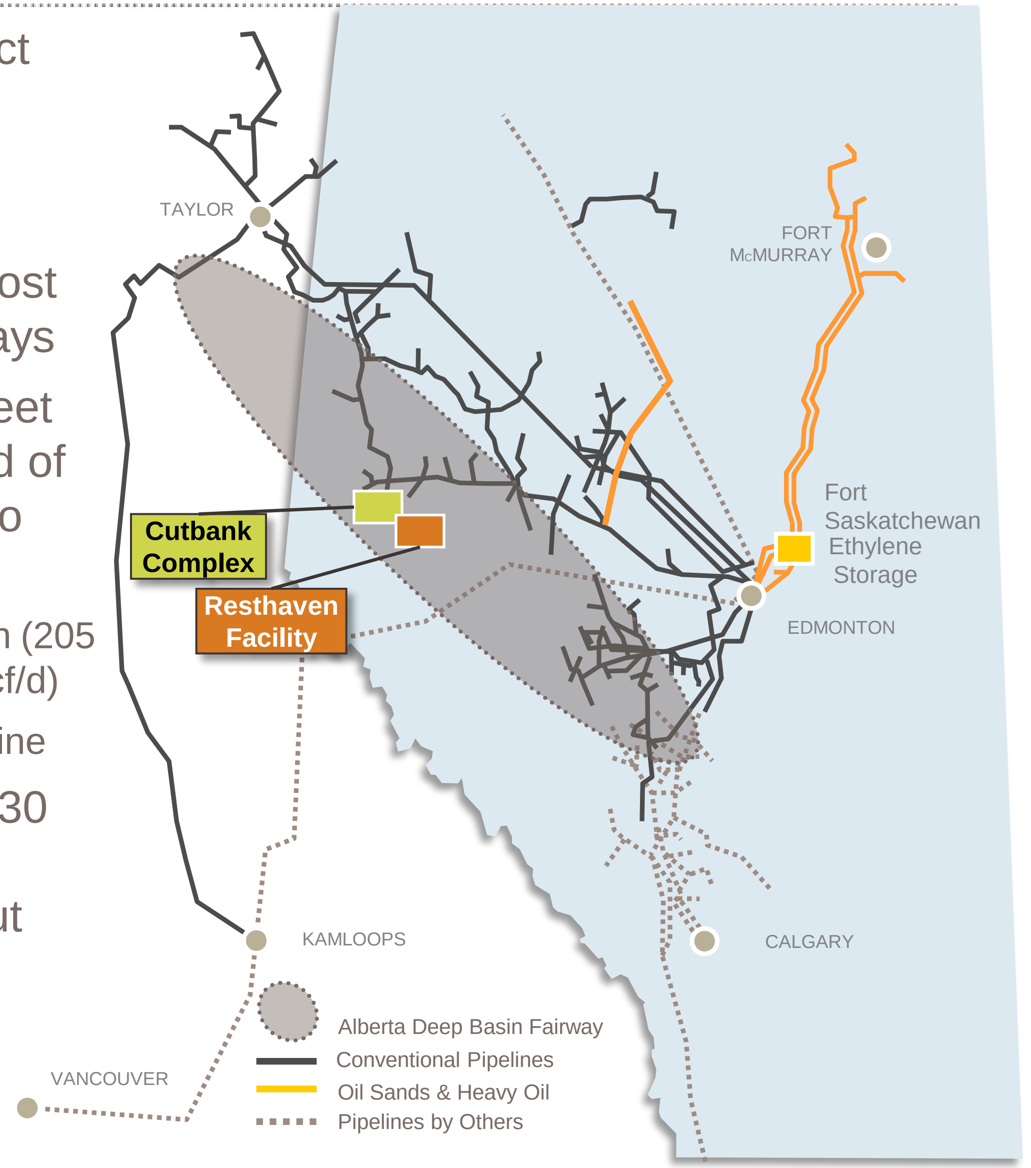
PEMBINA PIPELINE CORPORATION

MIDSTREAMER VS PRODUCER PERSPECTIVE ON JOINT FACILITIES

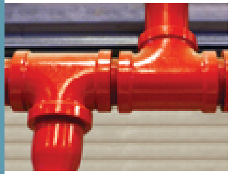
Stuart Taylor
Vice President, Gas Services
Calgary, AB, November 10, 2011

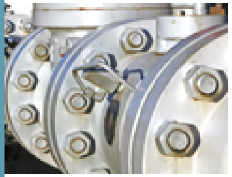
PEMBINA PIPELINE CORPORATION

- Pembina Gas Services LP is an indirect subsidiary of Pembina Pipeline Corporation
- NGL infrastructure is strategically positioned in the heart of one of the most active liquids rich gas development plays
- Cutbank Complex: Ownership in 3 sweet gas processing plants with 360 mmcf/d of processing capacity (305 mmcf/d net to Pembina)
  - Currently under expansion: ethane extraction (205 mmcf/d) and shallow cut expansion (50 mmcf/d)
  - Assets connected to Pembina's Peace Pipeline
- Resthaven Facility: Construction of $230 million 200 mmcf/d enhanced liquids extraction facility at existing shallow cut gas plant and new NGL pipeline
  - Ultimate capacity of 300 mmcf/d



MIDSTREAM DRIVERS: UNDERSTANDING IS KEY





- **Commitment – volumes and term**
- **Predictable cash flow** means lower risk, allows us to employ our low cost of capital.
  - Cash flow is defined by the contracts:
    - Firm vs. IT, Term / FS Profile, Area of Dedication
    - 3rd party streaming rights for jointly owned facilities
- **Operational flexibility** is needed where infrastructure is evolving
- **Producers' rights may vary by contract**

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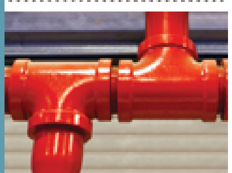
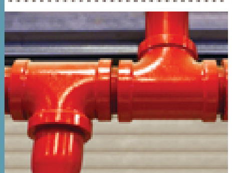
CONTRACTS – E+P VS. MIDSTREAM



- **CO+O Agreement Issues:**
  - **3rd party volumes -** Pure Midstreamers build or participate for the sole purpose of processing third party volumes
  - **Expansion rights -** ability to initiate terms, gathering vs. processing
  - **Excess capacity usage -** Owner priority access to utilize “spare” capacity. Curtailments
- **Gas Handling Agreements:**
  - **Operational flexibility -** utilize spare capacity, results in lower overall cost to producer.
  - **Operating costs vs. Capital costs -** Clear definitions, mechanism for the midstreamer to recover “maintenance” capital

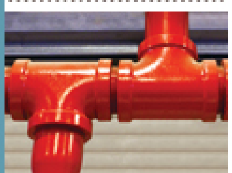


Potential Producer Arrangements with Midstreamer



- Fee for Service
  - Midstreamer Expands or Builds New Facility
  - Midstreamer Operates Facility/Finances Capital
  - Producer Commits to Significant Obligation to Underpin the Facility
    - Long Term 10 to 20 Year Take or Pay Commitment

Potential Producer Arrangements with Midstreamer



- Midstreamer and Producers Share in New Facility
  - PJVA Standard CO&O does not contemplate a Midstreamer as Owner
  - Revise CO&O to include Midstreamer
  - Build CO&O Fit for Purpose
  - Significant Time Required to “Re-write” CO&O

Potential Producer Arrangements with Midstreamer

- Midstreamer and Producers Expand an Existing Producer Owned Facility
  - PJVA Standard CO&O does not contemplate a Midstreamer as Owner
  - Producers have Rights under Existing CO&O
    - Producers unwilling to give up rights
    - Significant Clashes between Producer Drivers and Midstreamer Drivers
    - Significant Compromise Required
  - Revise CO&O to include Compromises
  - Significant Time Required to “Modify” CO&O

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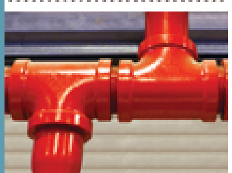
MIDSTREAMING AT PEMBINA



- **What we do (fee for service):**
  - Natural gas gathering and processing
  - NGL marketing, storage and transportation
  - Enhanced NGL recovery
- **Infrastructure development:**
  - Fee for service or joint venture

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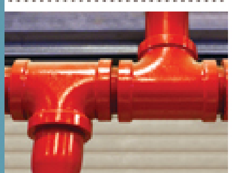
WORKING WITH A MIDSTREAMER



- **Advantages:**
  - Funding model – typically a lower cost of capital due to lower risk profile resulting in a lower RoR expectation than E&P
  - Development model – building “value-add” facilities that would not be economic for an individual producer
  - Fewer drainage concerns
  - Free up Producer capital for investment in reserves development
- **Opportunities:**
  - Opportunity to develop a long-term business relationship as a preferred supplier

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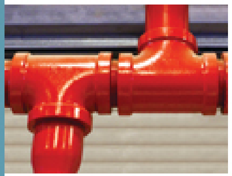
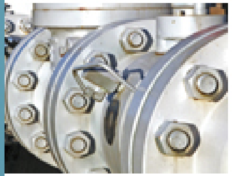
MIDSTREAMER COMMUNICATION





- **How can Midstreamers and Producers successfully work together?**
    - **We need to understand each others drivers**
        - Growth vs. Maintenance
        - Timing of development plans
        - Risk tolerance
        - Reliability of access to processing facilities
    - **Meet often to discuss:**
        - Operating conditions and capital plans
        - Successes and failures