ENBRIDGE

Pipeline Investment
Process and Evaluation Criteria

Alaska Legislative Audit & Budget Committee
Alaska Senate Resources Committee
October 13, 2004
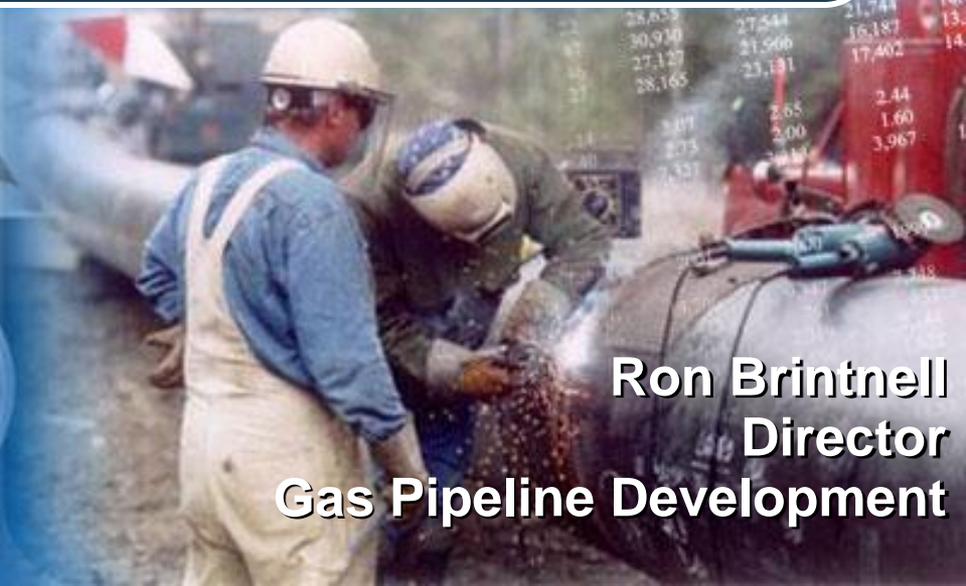
Ron Brintnell
Director
Gas Pipeline Development

Owners & Operators

- **Almost all major interstate natural gas transportation systems in North America are owned and operated by independent (non-producer) pipeline transportation companies**

- **Alliance Pipeline (Enbridge – 50% owner) was initially a producer led and majority owned project – all producers have since divested of their interest**

- **Mackenzie Delta pipeline is the most recent producer led pipeline initiative**

- **Almost every new natural gas pipeline project / proposal in North America is being developed by pipeline companies**

Supply Push

- **No existing take-away capacity into target market**

  (ex. M&NEP, Mackenzie, Alaska)

- **Insufficient take-away capacity**

  – **depresses wellhead prices relative to market**

 **(ex. Alliance, US Rockies)**
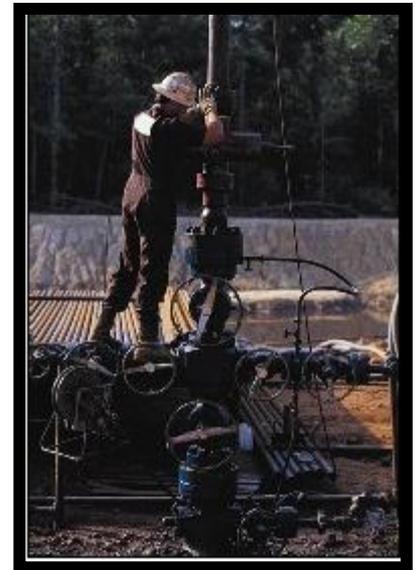
Catalysts For Development

Market Pull

- **Growing demand**

  - Economic, technology (gas fired generation)

  - Demographics

- **Price escalation**

  - Insufficient supply results in higher prices (ex. Millennium)

- **Insufficient peak load supply results in seasonal price spikes / price instability (both gas and electricity)**
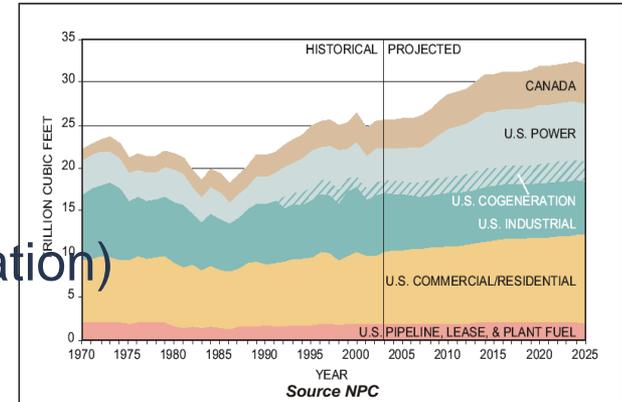
Investment Environment

- **Supply commitment**

  – **Quality and reserve life certainty**

- **Shipper commitment**

  – **Creditworthiness**

- **Constructability**

  – **Land access, environment, material, labor**

- **Financing**

  – **Equity and debt**

Motivations

- **Producer**

  - **Lowest cost of delivery (highest possible netback)**

  - **Lowest possible shipping risk (short term contracts, off-ramps, tariff certainty)**

  - **Reliability**

- **Market**

  - **Lowest cost of delivery**

  - **Competitive & reliable gas supply**

  - **Lowest possible shipping risk (short term contracts, off-ramps, tariff certainty)**

  - **Reliability**

- **Transporter**

  - **Fair return**

  - **Manageable risk**

  - **Financial certainty**

Investment Considerations – Risk vs. Reward

Technical

Labor

Legal & Regulatory

Socio Economic Benefits

Aboriginal Relations

Return on Equity

Commercial

Δ ROE

Government Relations

Risk

Environmental

Public Relations

Δ Risk

Higher Risk = Larger ROE
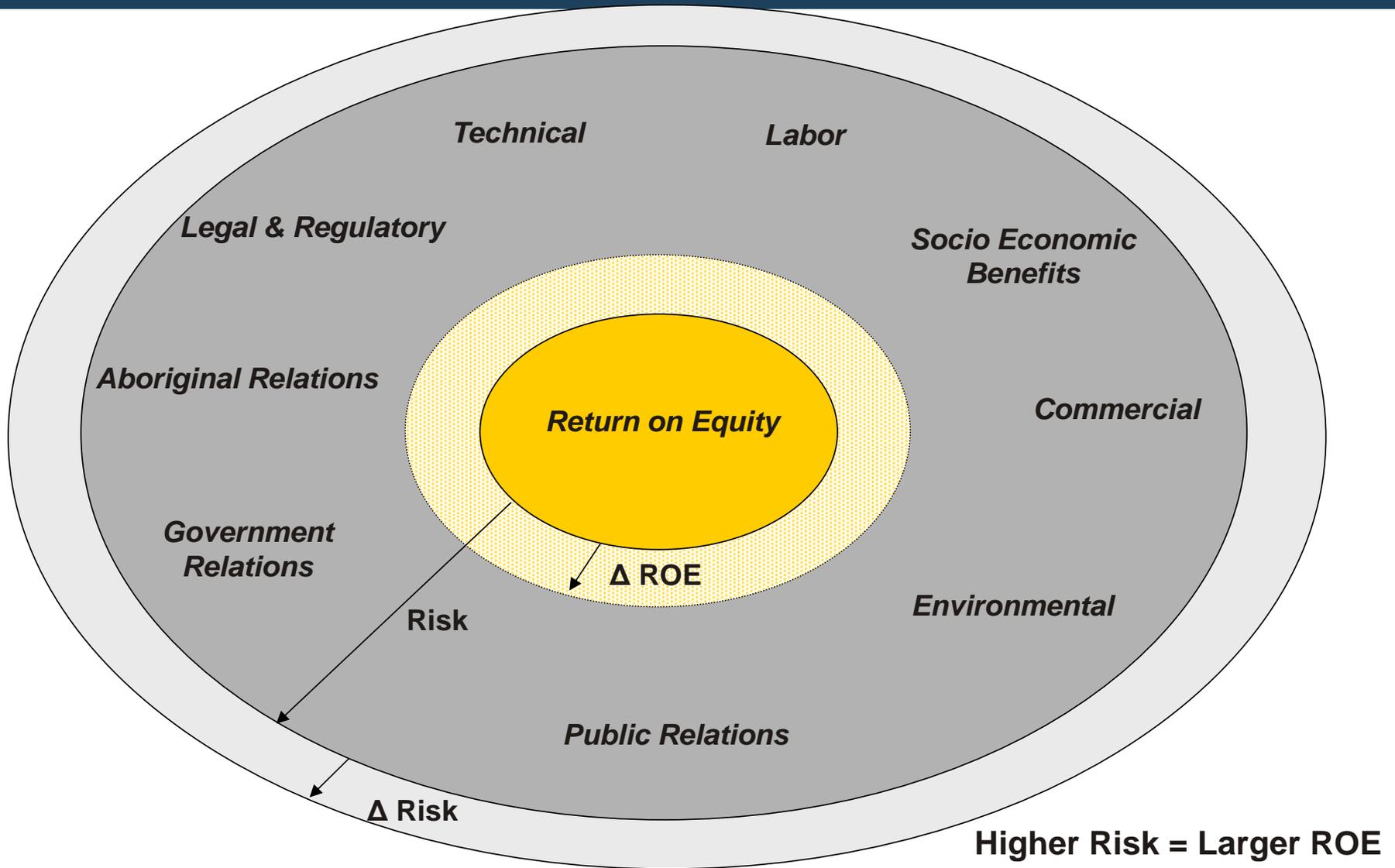
Pipeliner Perspective: What's Needed to Invest

- **Adequate ROE relative to risk (typically 12 – 15%)**

- **Access to debt**

- **Cost certainty**

- **Financially strong shippers**

- **Regulatory certainty**

- **Environmental process certainty**

- **Aboriginal and land owner alignment**
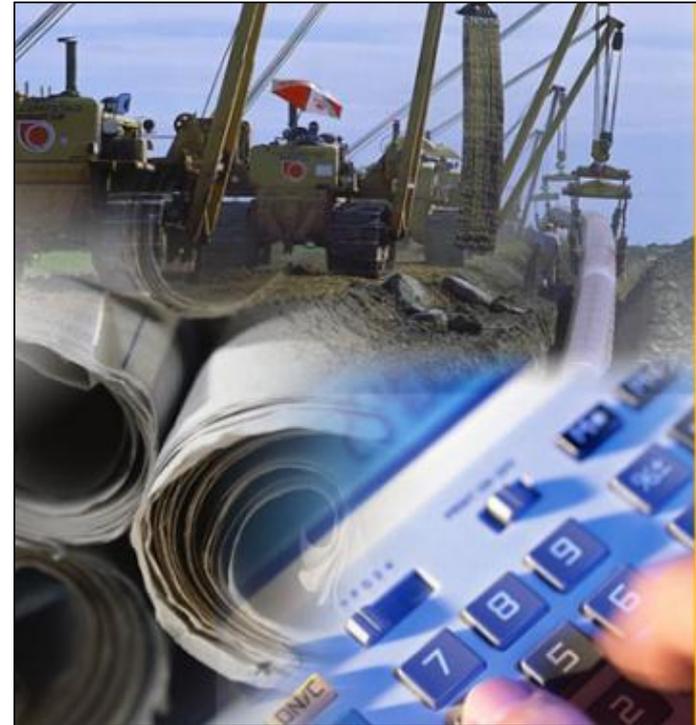
Financing Considerations

- **A large amount of capital is required
  - usually between 30-40% equity and 60-70% debt**

- **A number of banks usually provide debt financing, and in turn look carefully at all project details**

  - **Amount of equity**

  - **Financial strength of pipeline owners**

  - **Financial strength of shippers**

  - **Nature and terms of service agreements**

  - **Regulatory approvals**

  - **Experience of pipeline owners**

  - **Quality of natural gas reserves and reserve life**

Sources Of Debt

- **Banks - a consortium based on project size**

- **Capital Markets/Bonds**

- **Insurance Companies**

- **Pension Funds**

- **Municipal Bond Market**

- **Sponsors**

Lender's Terms

- Address capital cost overruns

- Lender has first priority over cash flow

- Incoming cash versus interest and principle repayment

- Risks associated with maintaining cash flow

- Debt amortization (equal payments, mortgage, bullet or customized)

- Coverage Ratio
  - interest coverage
  - debt service coverage ratio
    - principle
    - interest
    - banking fees
    - reserve accounts

Benefits of Enbridge Participation

- **Unique northern construction and operating expertise reduces construction risk**

- **Strong environmental track record**

- **Significant history of engagement with First Nations**

Benefits of Enbridge Participation

- **Potential market participant**
  - **reduce overall shipping risk for Producers**

- **Strong track record of negotiated tolling settlements with Producers**

- **Most recent cross-border regulatory experience**

- **Proven ability to lead multi-partner large scale projects**