



NORTHERN GAS: NEW ASSESSMENT OF THE IMPACTS

A Multi-Client Study

**140 Pages
41 Graphs
41 Maps
32 Tables
3 Appendices**

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ziff

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Northern Gas: New Assessment of the Impacts

a new multi-client study

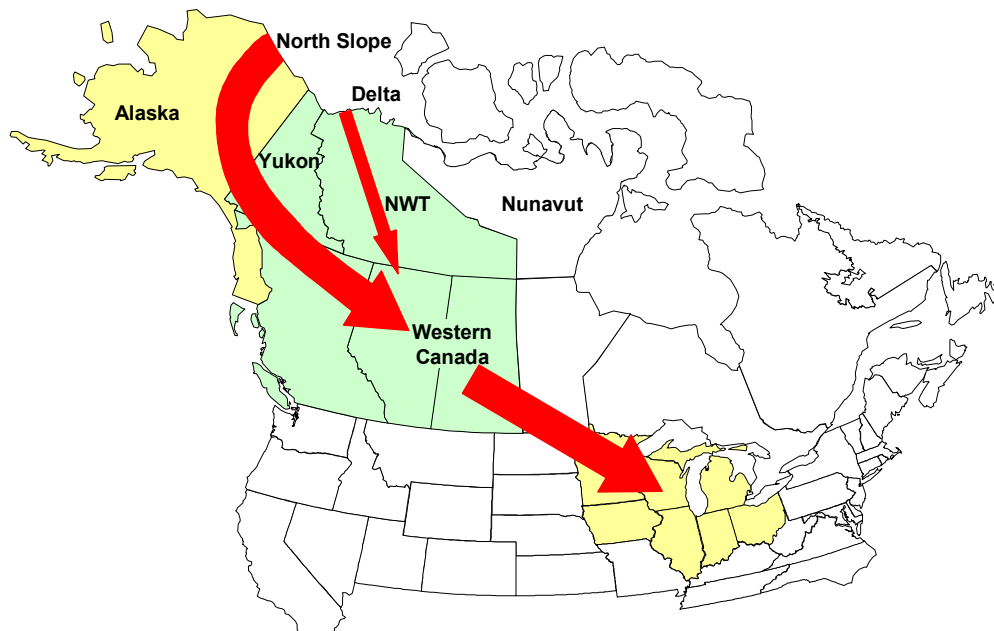
Many industry players plan to be active in Northern Gas, and its impact will affect the entire North American gas industry.

This new multi-client Northern Gas study provides North American producers, marketers, pipelines, LDCs, storage operators, end-users, and governments with Ziff Energy's practical insights and cutting-edge opinions of the impact that Northern Gas deliveries will have on pipelines, markets, and prices.

Focus areas will include:

- **THE PRIZE, PLAYERS, AND PLAYING FIELD:** Northern Gas Resources; the Players; Exploration Strategies; Field Development and Gathering Systems
- **NORTHERN ISSUES:** Northern Values and Beliefs; Canadian Land Claims; Northern Participation in Pipeline Ownership; U.S. Energy Policy; Regulatory Framework; Human Resource Requirements
- **NORTHERN GAS SUPPLY OUTLOOK TO 2030**
- **IMPACT ON PIPELINE FLOWS AND STORAGE:** Pipeline Flows from Western Canada; Pipeline Expansions; New Grassroots Pipeline; Midwest/Northeast Pipelines; Pipeline Costs and Tolls; Gas Storage
- **IMPACT ON GAS MARKETS:** Sector Outlook With and Without Northern Gas; Alberta Oil Sands Gas Needs
- **IMPACT ON NATURAL GAS PRICES:** Influences on Prices; Henry Hub Price; Basis Differentials; Other Market Prices; Field Netbacks
- **LNG OR NORTHERN GAS?** Sustainability of Traditional Supplies; Scenarios for LNG Growth; Cost and Timing Risks; Supply Security
- **IMPACT ON NATURAL GAS LIQUIDS:** Northern Supply; Western Canada; Liquids Markets

Northern Gas Flows



Project Team

Ziff Energy Group, an experienced and well established gas consulting firm (offices in Houston and Calgary) provides independent research, analytical support, insight, advice, and testimony for our clients.



W.P. (Bill) Gwozd, P.Eng. – Vice President, Gas Services, has a quarter century of natural gas experience. Mr. Gwozd is responsible for all Ziff Energy gas services: the North American Gas Strategies Retainer Service, customized consulting assignments, and multi-client assessments. He will lead the Impact of Northern Gas study.



Dennis Elias – Director, Gas Consulting, has over fifteen years of experience in gas gathering and processing, transportation, and distribution. Mr. Elias's experience includes managing and directing natural gas supply and demand forecasts, strategic planning, gas commodity risk management, stakeholder relations, land management, and regulatory affairs.



Simon Mauger, P.Geol. – Manager, Gas Services, has a quarter century of experience in the upstream oil and gas industry including exploration and development geology, resource and economic evaluation, technical research reports on supply, demand, and transport issues, and provides an independent assessment of reports prepared by others. He is also a member of the Canadian Potential Gas Committee.



Bernie Otis, Senior Associate – has over three decades of experience, in the Midwest and U.S. Northeast gas pipeline and gas utility industry, plus extensive knowledge of gas supply planning and analysis, daily gas supply operations, tolls and tariff development, and gas supply planning and gas purchasing/contracting for a gas utility.



Dave Vetsch, P.Eng. – Associate, has a quarter century of experience in gas consulting and management covering gas supply, transportation, storage, deregulation of gas retail markets, legislative changes, regulatory intervention, hedging strategies, and economic evaluations. He has also managed all functions for junior oil and gas companies.



Cameron Gingrich, B.Sc., BA – Lead Analyst, has seven years analysis experience in the natural gas, financial and transportation industries, including detailed analysis for the North American Gas Strategies Retainer Service, multi-client studies, and custom consulting projects such as: analysis of pipeline tolls, gas supply/storage load duration modeling, gas price/basis differential modeling, and economic modeling.



Dana Bozbiciu, B.Sc. – Intermediate Analyst, has seven years experience in the Romanian oil and gas industry, including seismic operations; technical analysis for construction of natural gas pipelines and compressor stations; natural gas distribution systems; and power line installations. Ms. Bozbiciu provides analytical support to custom consulting, multi-client assessments, and the North American Gas Strategies Retainer Service.



Paul Ziff, - CEO, is a leading consultant to the natural gas industry and a specialist on natural gas industry strategies. He provided analytical insight and executive review of all phases of the multi-client Northern Gas study.

The group will be supported by Ziff Energy Group's full professional, analytical, and administrative team as well as Associates who will provide an independent review and insight on the assessment.

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