

“Shifting Supply” The Union Gas System Portfolio Response

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- Gas Supply Plan - Guiding Principles
- ICF July 2010 Update and Outlook
- Managing the portfolio – Short Term
- Managing the portfolio – Longer Term

- Ensure secure & reliable gas supply to the Union Gas service territory at a **reasonable cost**
- Minimize risk by **diversifying** contract terms, supply basins & upstream pipelines
- Encourage **new sources** of supply as well as new infrastructure to the Union Gas service territory
- Meet planned **peak day** & seasonal gas delivery requirements
- Deliver gas to various receipt points on the Union Gas system to maintain **system integrity**

Based on studies ICF has conducted over the past two years, we have significantly expanded our North American Resource Base.

- We have more than doubled the U.S. and Canada shale resource to 1,900 Tcf over the prior level of 825 Tcf in the April 2010 case.
- With 1,500 Tcf of gas in the supply curves at or below \$5.00 per MMBtu, the current U.S and Canada natural gas consumption level of 27 Tcf per year, could be met for another 55 years at attractive prices.
- The full potential of natural gas from unconventional formations (including shale) will not be realized for many years due to environmental concerns, land access restrictions, and drilling constraints.
- Far away frontier resources like Alaska and Mackenzie Delta are not projected to be needed by the U.S. and Canadian gas grid within the next 25 years.



U.S. and Canada Natural Gas Resource Base

(Tcf of Economically Recoverable Resource, Assuming Current E&P Technologies)

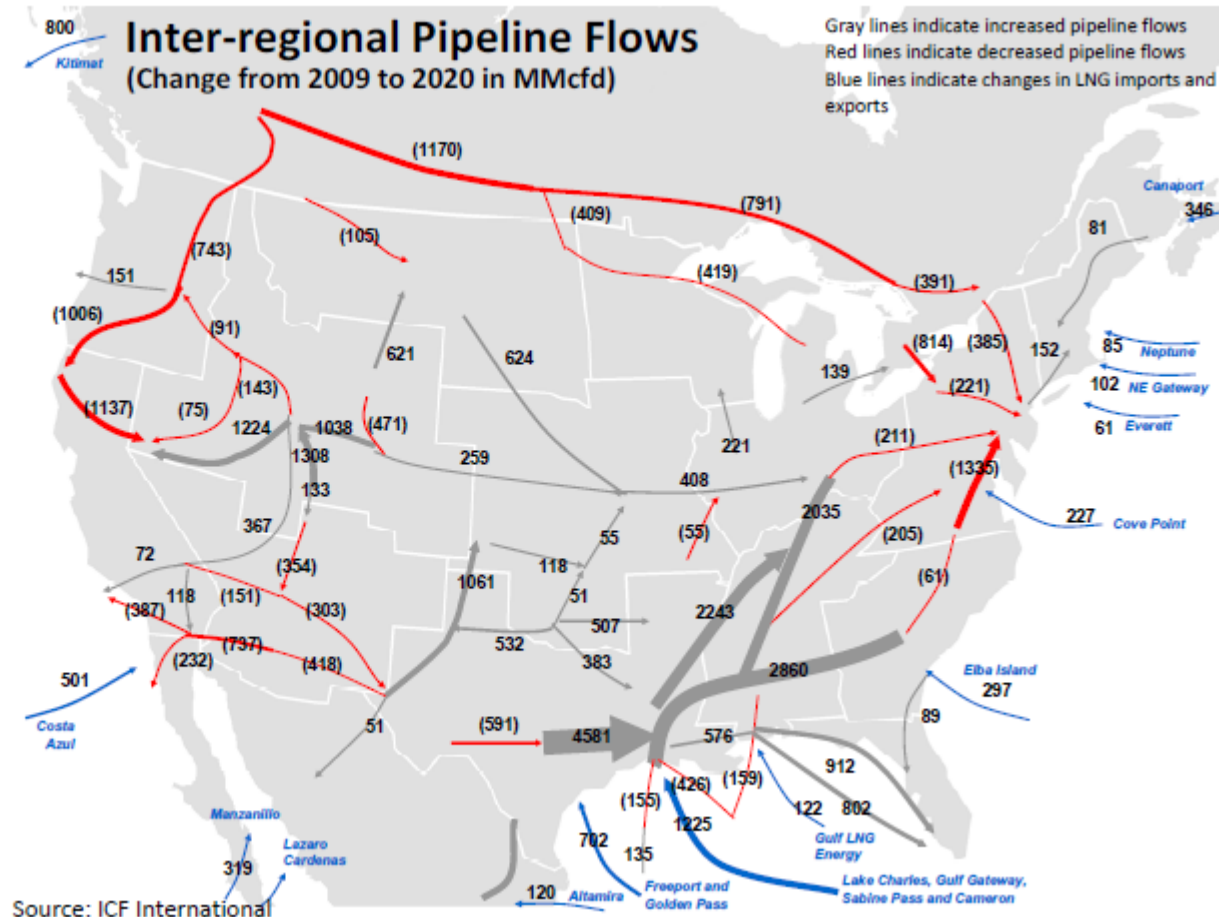
	Proven Reserves	Unproved Plus Discovered Undeveloped	Total Remaining Resource	Shale Resource ¹
Alaska	7.7	153.6	161.3	0.0
West Coast Onshore	2.3	24.6	27.0	0.3
Rockies & Great Basin	66.7	388.3	454.9	37.9
West Texas	27.6	47.7	75.3	17.5
Gulf Coast Onshore	70.1	684.7	754.8	476.9
Mid-continent	37.0	205.0	241.9	133.9
Eastern Interior ²	18.6	795.7	814.3	728.1
Gulf of Mexico	14.0	238.6	252.5	0.0
U.S. Atlantic Offshore	0.0	32.8	32.8	0.0
U.S. Pacific Offshore	0.8	31.7	32.5	0.0
WCSB	60.4	664.0	724.4	508.8
Arctic Canada	0.4	45.0	45.4	0.0
Eastern Canada Onshore	0.0	12.8	12.8	0.0
Eastern Canada Offshore	0.5	71.8	72.3	0.0
Western British Columbia	0.0	10.9	10.9	0.0
US Total	244.7	2,602.6	2,847.3	1,394.5
Canada Total	61.3	804.5	865.8	508.8
US and Canada Total	306.0	3,407.1	3,713.0	1,903.3

1 . Shale Resource is a subset of Total Remaining Resource

2. Reference case assumes drilling levels are constant at today's level over time, reflecting restricted access to the full resource development.



- Increases in flows from the Gulf Coast to the east are due to increases in Mid-continent shale gas production.
- REX Pipeline enables increasing flow from the Rocky Mountains eastward.
- Marcellus gas production growth displaces gas flows into the Northeast U.S. (Shifts within the Northeast are not depicted on this interregional flow map).
- Declining conventional production in Alberta and increasing gas consumption for oil sands development causes flows from Western Canada to decline.



August, 2010

Managing the portfolio – Short Term

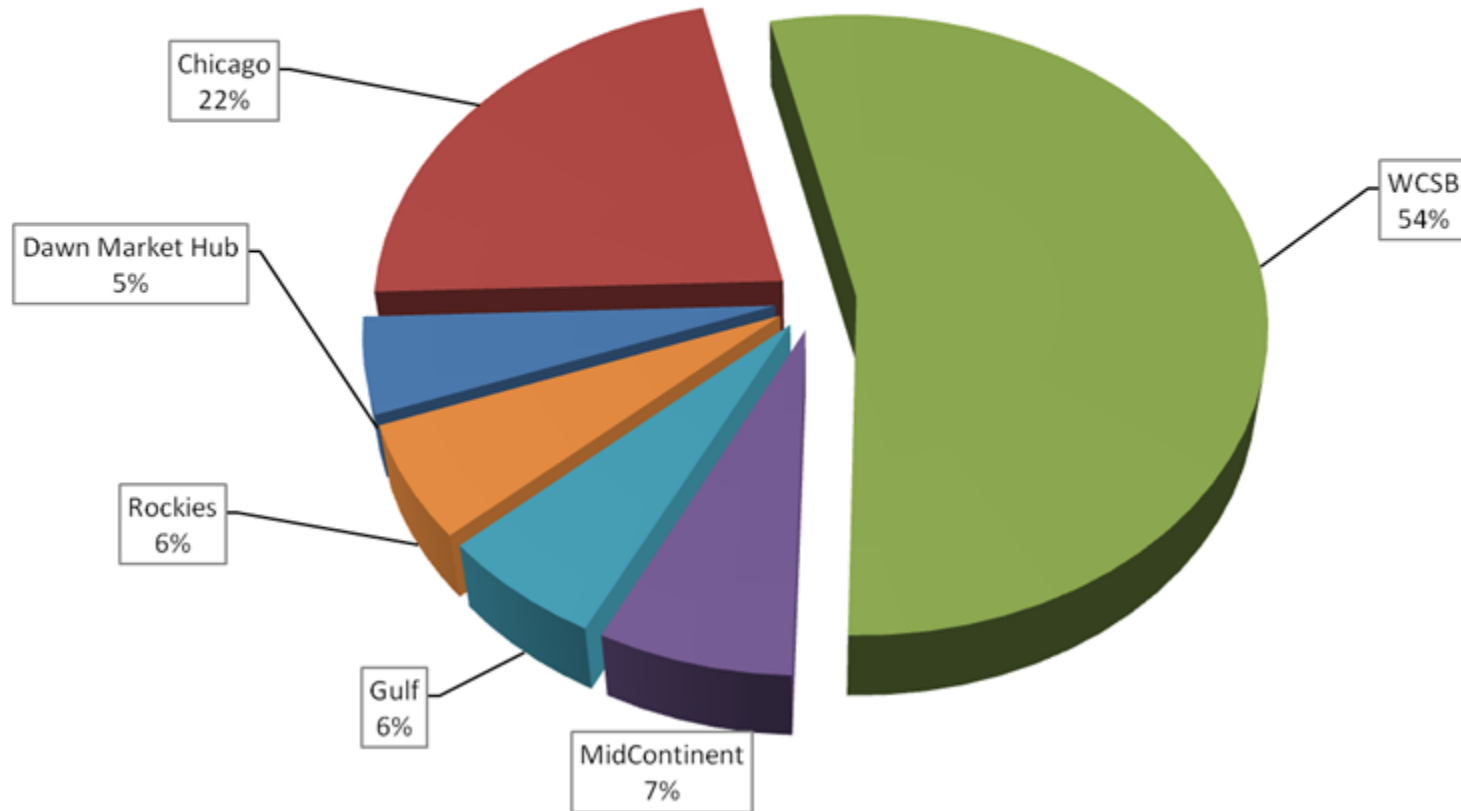


- November 1, 2010 – gas supply plan needs additional supply
- Our objective is to respond to new sources of supply that are available to the Ontario market

Proposed System Supply Portfolio November, 2010



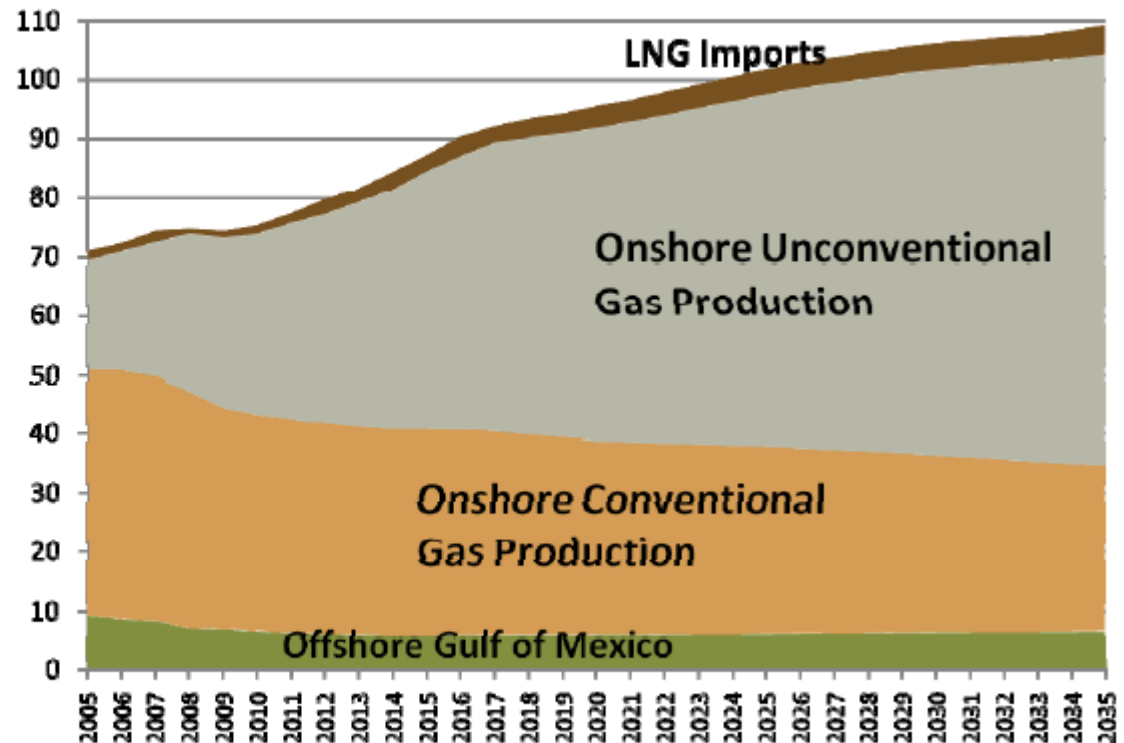
Diversity of Supply Within System Portfolio
Total = 370,000 Gj/day





- Onshore conventional and offshore gas production continues to decline, while unconventional production grows robustly.
- Onshore unconventional gas production grows from 38 % of total gas supply in 2009 to 64 % in 2035.

U.S. and Canada Natural Gas Supplies (Average Annual Bcfd)



Source: ICF International

- How will WCSB, BC/Marcellus/Mid-Continent Shales, Rockies and traditional Gulf supply land in Ontario?
- What will be the optimal mix in order to meet our Gas Supply Plan objectives?
- We encourage all of our suppliers to work with us and to continue to bring us your creative solutions and responses to these questions.
- Union Gas will participate in OEB Natural Gas Market Review
 - Early August, OEB reviewing:
 - emerging N.A. trends in gas supply & demand
 - Impacts on pricing & tolling; infrastructure investment
 - Trends in regulation & policy development in other jurisdictions & relevance to Ontario
 - Board will consider stakeholder comments and a staff report before deciding what action, if any, is required

