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"Changing Natural Gas Pipeline Throughputs in Canada"

Presented at 2015 EIA Energy Conference

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About the National Energy Board (NEB)

- National Energy Board Act
- LNG Export and Import Licence Applications (summary and links to LNG export licence applications)
- Market Snapshots (energy information updates; weekly updates)
- Energy Futures Report (long term projections of supply and demand; Nov 2015 new release)
- Regulatory Document Index (submissions, correspondence, decisions)

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Major Pipeline Systems Regulated by the NEB

- 73,000 km of interprovincial and international pipelines.
- Pipelines shipped $159 billion worth of crude, petroleum products, NGLs and natural gas.
- Transportation cost of approximately $7 billion.

Source: NEB 2014 Annual Report to Parliament

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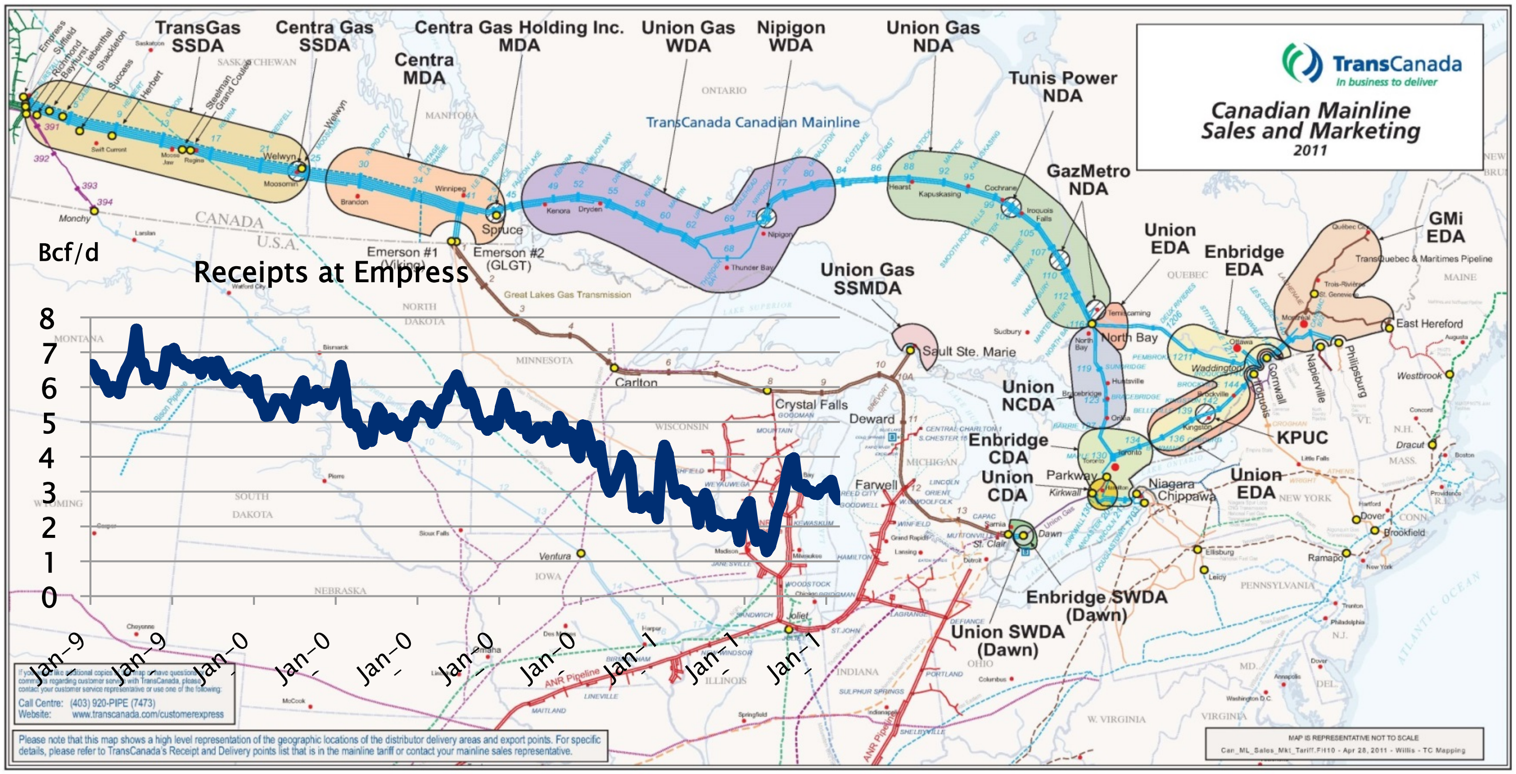
Changing Natural Gas Flows in Canada



Source: Map - TransCanada PipeLines; Empress Receipts – GLJ

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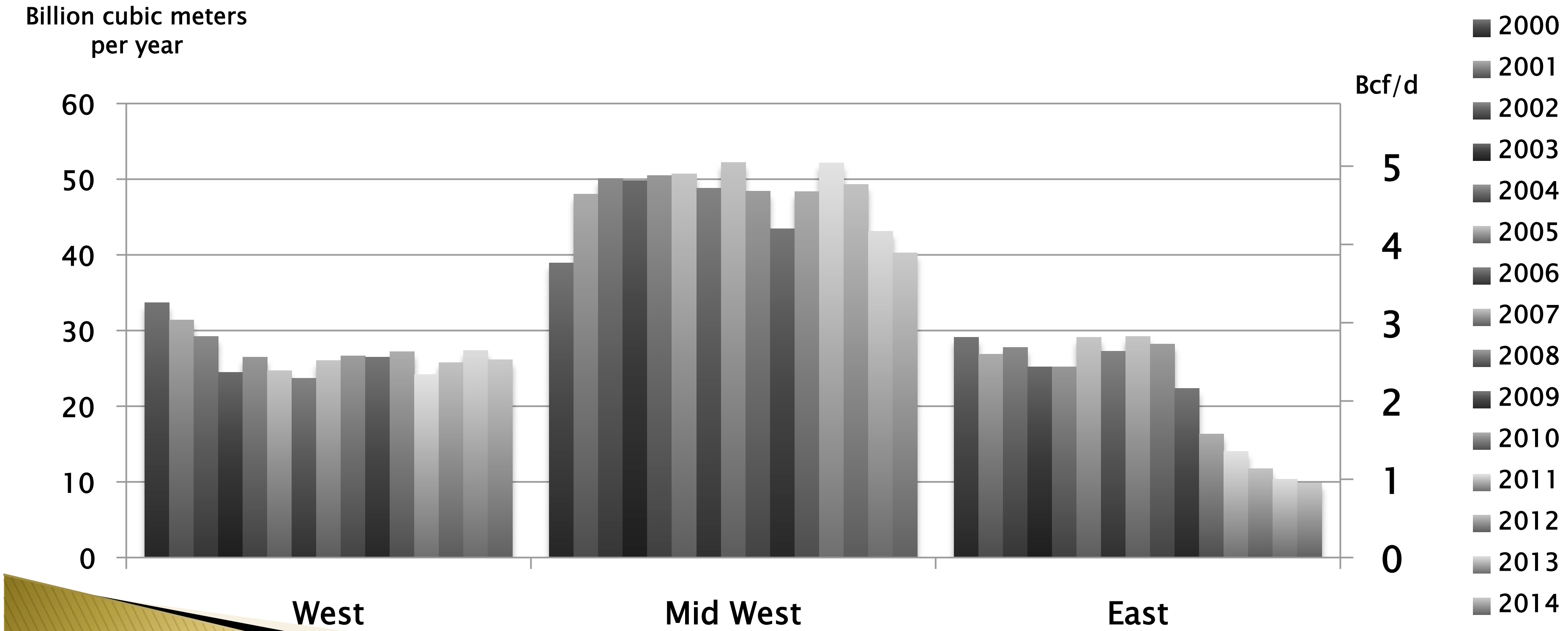
Declining Throughputs to Markets in the East



Source: NEB Commodity Statistics, Gas – Historical Summary be Region

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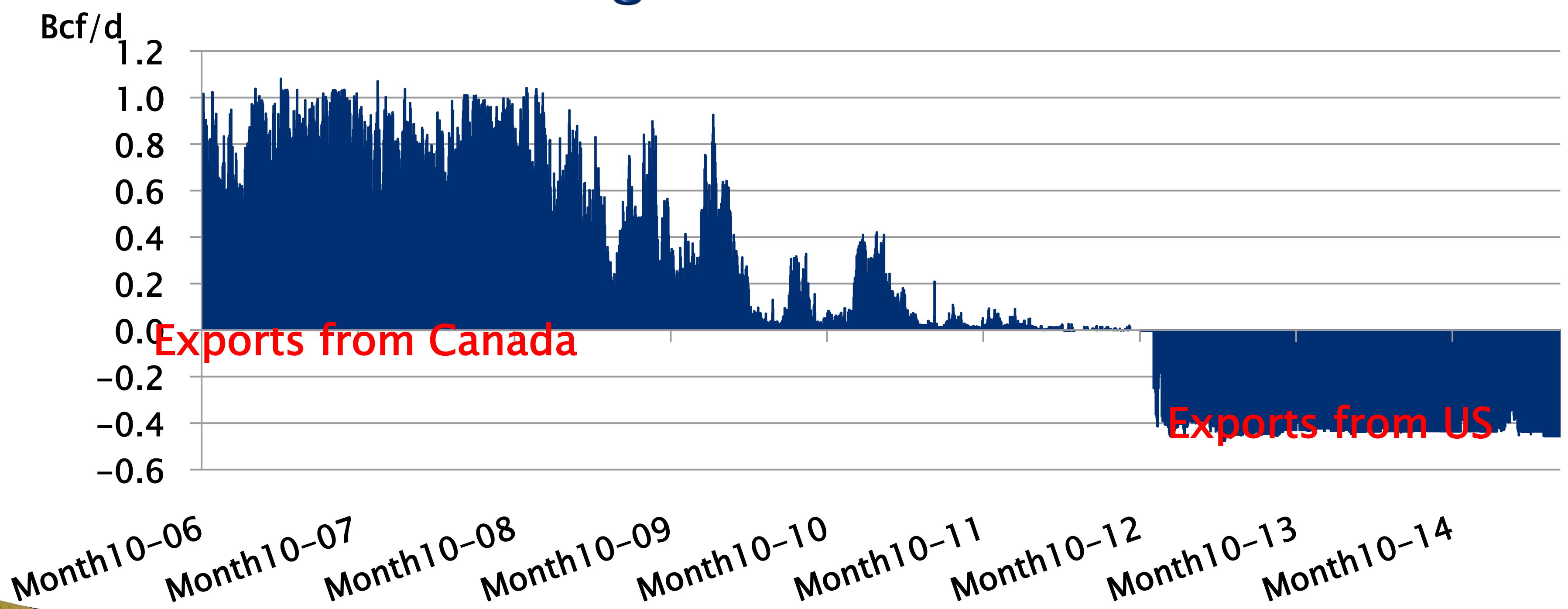
Flow Reversals at Niagara



Source: LCIEI; daily throughputs @ Niagara

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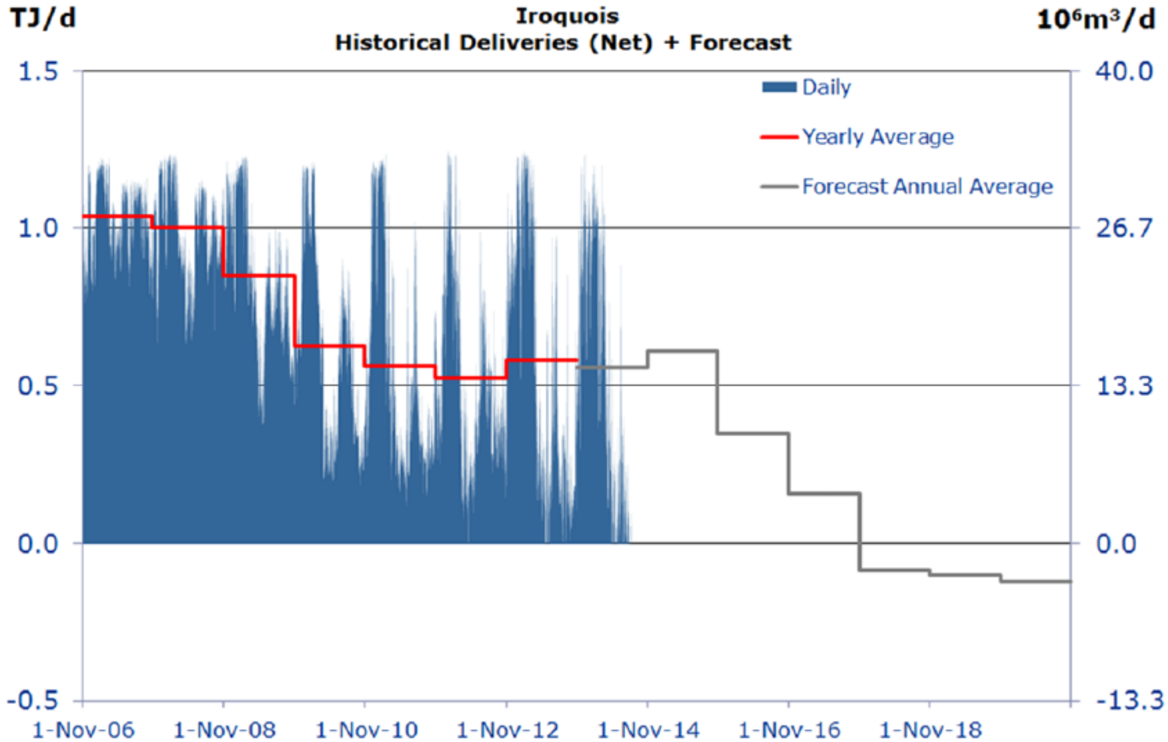
Anticipated Flow Reversals at Iroquois



Source: TransCanada filing to Ontario Energy Board, re: EB-2014-0289, Jan. 16, 2015

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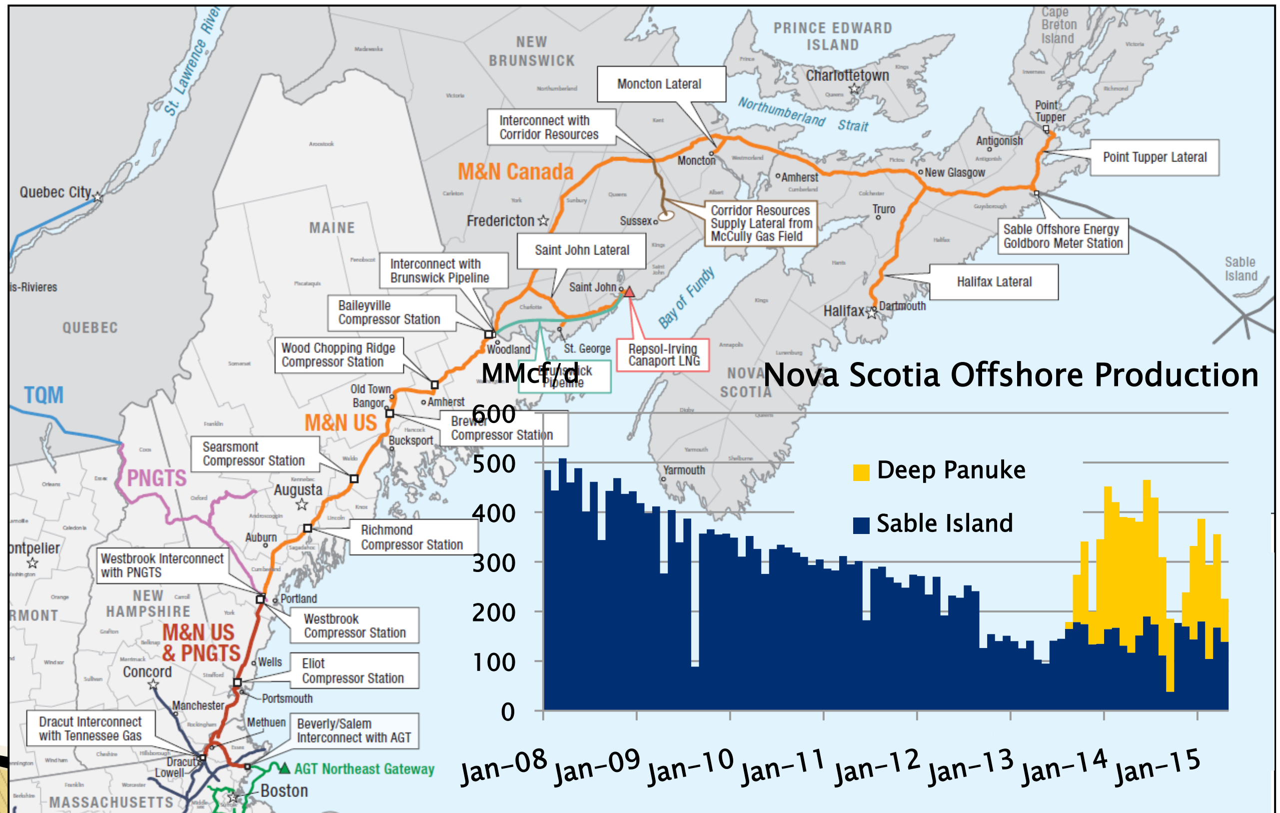
Unique Market in the Maritimes



Source: Maritimes & Northeast Pipeline; Canada-Nova Scotia Offshore Petroleum Board

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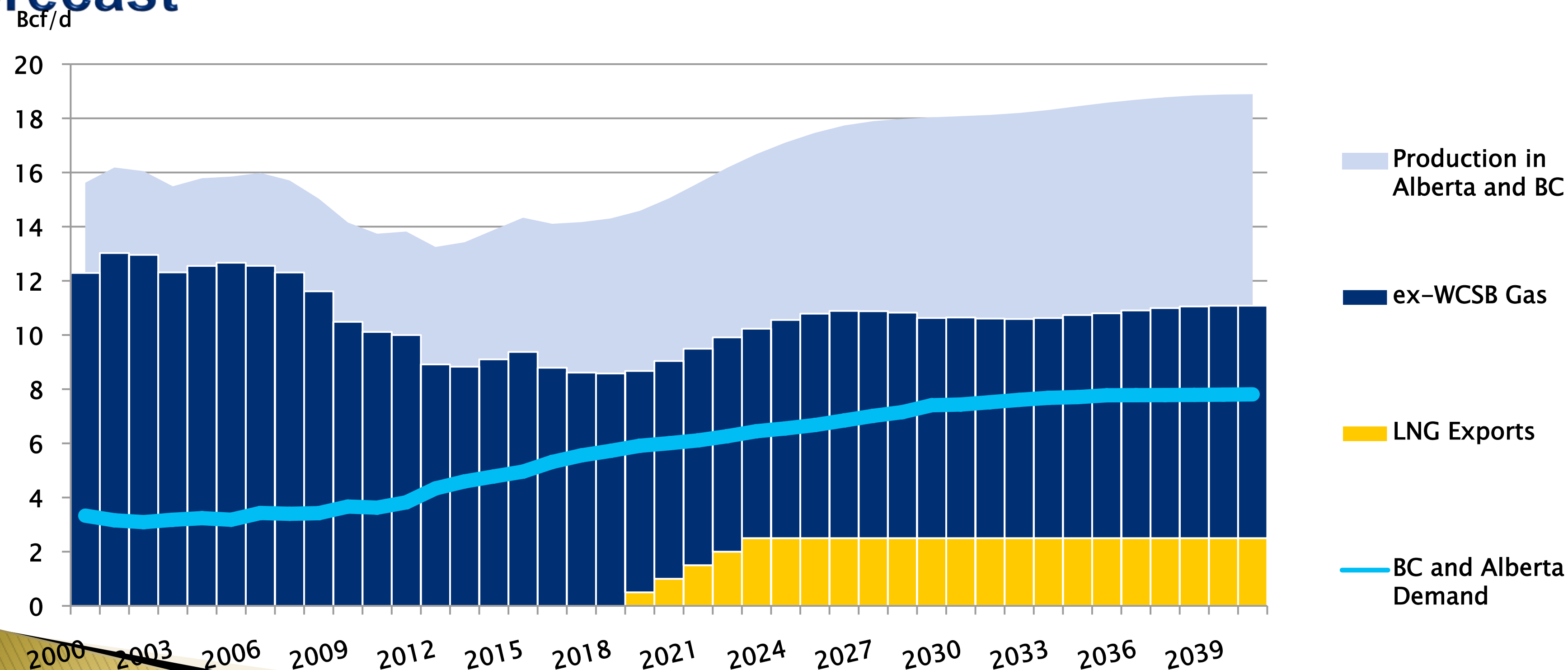
Natural Gas Production and ex-WCSB Exports Forecast



Source: Energy Futures 2015 (**Pre-consultation results; subject to change**)

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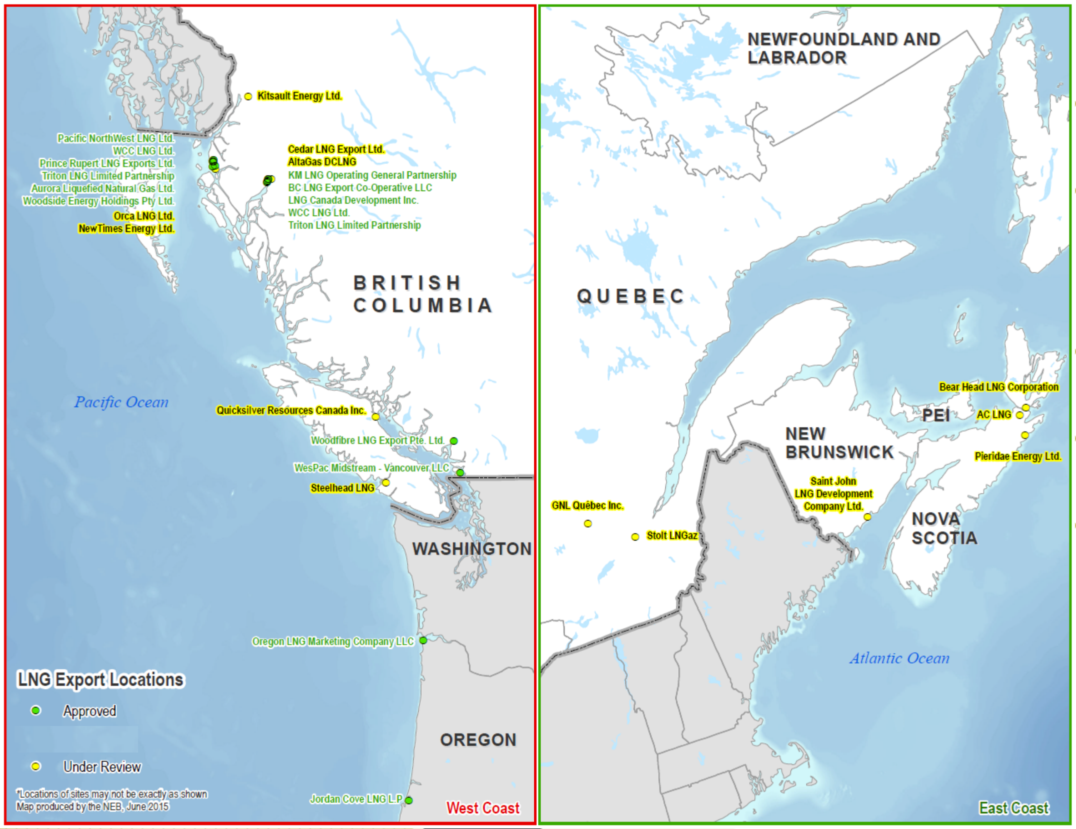
Potential Growth Markets for Canadian Gas



LNG exports from Canada;

Mid-West US market;

Pacific Northwest.

Source: National Energy Board

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Conclusions

- Changing gas flows continue to characterize the Canadian natural gas market.
- Less Canadian gas into the US Northeast market.
- Traditional export points are evolving into import points (ex. Niagara, Chippawa, Iroquois).
- Maritimes to turn from net-exporters to net-importers of natural gas before the end of the decade; pipeline de-bottlenecking plans in early phases of regulatory review (FERC).
- Canadian production expected to increase to ~19 Bcf/d by 2040. Forecast assumes 2.5 Bcf/d of LNG exports from Canada by 2023. 8 Bcf/d of natural gas available for ex-WCSB export.* *Preliminary results from Energy Futures 2015; to be released in November 2015.
- More Canadian gas will be exported to US Mid-West and US West markets.