25 Adelaide St. E
Suite 1602
Toronto ON, M5C 3A1

APPrO
ASSOCIATION OF POWER PRODUCERS OF ONTARIO

Submissions of the Association of Power Producers of Ontario ("APPRO")

Natural Gas Market Review EB-2010-0199

November 2010

The Ontario Energy Board (the "Board") initiated a process on July 13, 2010, to assess the changing dynamics of the natural gas market in North America. In particular the Board wanted input from interested parties on the changes that were expected to occur and in particular to use this to help determine the need for regulatory changes in Ontario. As part of the overall Market Review, the Board retained ICF International to provide a 2010 Natural Gas Market Review as a basis for discussion. APPrO believes that the timing of the Market Review is timely given that the recent shale gas and other industry developments.

In addition to its power point submission and oral presentation, APPrO is pleased to provide these comments for consideration.

APPRO notes that the key findings[1] in the ICF report include:

1. *Demand for Natural Gas is Expected to Continue Growing, Led by Growth in the Power Sector*

    - *Total North American demand for natural gas is projected to continue growing, led by growth in the power sector.*
    - *Ontario's power sector gas use is also expected to continue growing, climbing to nearly one-third of total demand by 2020.*
    - *As power generation becomes a large part of natural gas demand, seasonal and daily use patterns will change. These changes could place stresses on Ontario's pipeline and storage infrastructure.*

2. *Supply Sources and Inter-regional Pipeline Flow Patterns are Changing*

[1] ICF International 2010 Natural Gas Market Review August 20, 2010, page 11

- *Unconventional gas resources, including shale gas, are expected to make up over 50 percent of total gas supply by 2020.*

- *Shale gas is expected to be the principle source of growth in North American gas supplies.*

- *Many shale resources, such as the Marcellus Shale, are located in geographically different regions than historic supplies. These shifts in supply sources will impact pipeline flows and the development of new pipeline capacity.*

- *Conventional gas production in Western Canada is expected to continue declining, and gas demand in Alberta for oil sands projects is expected to continue increasing. This is expected to cause TCPL's mainline flows to continue decreasing.*

- *While Western Canadian gas (delivered via TCPL) is expected to remain the largest single supply source for Ontario, it is expected to decline both in absolute terms and as a share of the total supply*

- *As a result of the decline in Western Canadian production, an increasing share of Ontario's gas supplies is expected to be met by gas from the U.S., especially shale gas.*

- *While Marcellus Shale production is not projected to be a major direct supply source for Ontario, it is projected to displace some exports of gas from Ontario to the Northeast U.S., allowing a greater share of gas transported on TCPL to remain in Ontario*.

3. *Natural Gas Prices are Projected to Increase*

    - *Projected demand growth, principally from growth in the power sector, will drive North American gas prices higher.*

    - *While gas prices are not expected to reach the very high levels seen in the mid- to late-2000s, average annual Henry Hub prices are projected to rebound to $5 to $6 per MMBtu.*

    - *Given the ample North American resource base, the projected gas prices are adequate support continued development of the supplies necessary to satisfy the projected demand growth.*

    - *While changes in supply and demand conditions are important in the determination of Ontario's gas prices, so are policies that impact TCPL's rate structure. The response to projected reductions in TCPL mainline flows is a critical issue for Ontario gas*

Except where noted below, APPrO generally agrees with ICF's summary of the market. APPrO also wishes to note that:

> References to gas flows within the ICF report are often annual averages and that the market must operate during peak periods. Understanding peak flows will also be important to assessing infrastructure requirements to serve the highly seasonal Ontario market.
>
> ICF indicates that Marcellus gas is not projected to be a major direct supply source for Ontario. Given the proximity of the Marcellus shale supplies to Ontario, the existing infrastructure that exists between Dawn and the Marcellus region, the relative ease in reversing flows in these systems, the variety of open seasons and contracts that have been signed for backhaul to Niagara, APPrO believes that there is greater potential to have Marcellus gas play a more significant role in Ontario than suggested by ICF
>
> Developments in supply, transportation or market conditions can change quickly which will affect relative pricing across the continent and hence demand for alternate gas supplies at Dawn.
>
> APPrO agrees with ICF that gas demand in Ontario from power generation will continue to grow. Gas-fired generation is an important part of the overall mix of generation in Ontario to ensure competitive and reliable electricity supplies, to meet peak electricity requirements, and to backstop less dispatchable sources of generation.
>
> The nature of this gas-fired power generation growth will require continued access to sufficient competitive gas supplies and access to the right mix of transportation distribution and balancing services.
>
> A portion of the existing gas-fired load from the non-utility generators ("NUG") is expected to convert from a base load operation to an operation that will result in a large share of their power becoming dispatchable. This will begin to occur as the respective power purchase agreements naturally come to term[2]. These generators will also require additional transportation, distribution and balancing services to help manage the fuel requirements of this dispatchability.
>
> The structure of the new gas-fired generation power market in Ontario provides that gas be purchased at Dawn. Dawn therefore needs to remain a viable market hub to ensure liquidity and price transparency.

In the August 20, 2010 Letter, the Board noted that it was looking for responses to several questions. APPrO submits these responses to those questions:

Question 1: What are the Opportunities for the Ontario Market Participants?

---

[2] APPrO Presentation October 7/8 2010

APPrO believes that there will be continued reduction in west-east flows in favour of additional south-north flows. ICF also points out the likely decline in west-east gas flows. This decline is being driven by lower WCSB production, higher demand for gas in western Canada, higher west-east transportation charges from the WCSB, increasing shale supply availability from the southern US, as well as access to new Marcellus and other more local shale gas supplies.

Changes in flow and price patterns may trigger the need for relatively minor adjustments to infrastructure to facilitate gas flow movements. Existing pipeline operators are already proposing minor changes to facilitate two-way flow, service enhancements and other modifications to facilitate access to new shale supplies.

The combined impact of lower WCSB deliveries to the east results in higher a transportation toll which further exacerbates the competiveness of the WCSB. The challenge will be look for more creative ways to ensure captive customers are treated fairly and they do not shoulder the full burden of the costs of shifting supply basins.

Increased access to new shale gas supplies as well as shifting load patters for gas fired generators will increase the opportunities for the development of new storage and other balancing services.

The development of shale gas supplies in North America may be in its early stages. Recent technological changes have made a significant impact in the last few years in making these supplies commercially feasible. As technology continues to advance other non-conventional supplies in Eastern Canada, the Mid-west US and even Ontario may be commercially developable in the future. As these new supplies evolve, the market conditions and regulations should encourage access to these supply sources. Access to new supplies can help to maintain a competitive gas market, and increase the overall security of supply to the region.

Question 2: What are the Challenges for the Ontario gas market, consequences and issues?

Many customers in Ontario are captive to existing systems and have limited direct access to these new supplies. A major challenge will be to ensure that captive customers do not bear the burden of both limited access to new supplies as well as being exposed to the higher cost of transportation systems that are experiencing declining throughput due to shifting supply and demand patterns.

As ICF points out that between 2009 and 2020, Ontario demand is expected to grow by 0.8 bcfd (0.3 tcf annually)[3]. This will require expansions in both transportation systems between market consumptions points and market hubs, as well as expansions in storage and balancing services to accommodate this

[3] ICF International 2010 Natural Gas Market Review August 20, 2010, Exhibit ES 2

growth. As supply basins evolve this may naturally require additional infrastructure development between supply basins and market hubs.

Question 3: Should the OEB look at the impacts on existing pipeline facilities as a result of new supplies or pipelines developed to access new shale supplies, if so why, what are the implications and risks?

Given the capital intensive nature of the pipeline industry, there is a need for efficient and rational development of new facilities.

Ontario is currently served by a combination of intra-provincial pipelines, inter-provincial pipelines as well as international pipelines. These collectively transport the majority of the supply into Ontario as well as provide for transit volumes to downstream markets in Eastern Canada and the Northeast US. If the Board were to look at impacts on other pipelines, it is not clear which pipelines would be assessed for impact, how far upstream these impacts would be considered and how the impacts would be evaluated. The 'market' may be in a better position to assess the development of new supply basins, but risks must follow rewards. The current system of rate making creates distortions in the market place with rewards not necessarily following rewards. As previously noted there are many captive customers in Ontario that under the current transportation rate making regime are disproportionately bearing the risk of the shifting supply basins.

It was pointed out in this process that there is an urgent need to expand transportation infrastructure between Parkway and Maple[4]. Presumably this expansion would be matched with corresponding expansion between Dawn and Parkway. In principle, APPrO fully agrees that connectivity of the Ontario market to Dawn is critical. Many gas-fired power producers use this path to access Dawn gas supplies. Ongoing growth of this corridor may be necessary. It was also pointed out that a less efficient alternative currently exists[5] which results in gas being backhauled a long distance through the Mid-west US, to Manitoba and through Northern Ontario. This may be a much longer path but it also better utilizes existing infrastructure that is experienced declining throughput. Moreover these same captive customers that are incurring higher transportation costs may subsidize the new facility expansions if the incremental revenue from the new customers does not match the incremental costs from the expansion through the economic life of the project. APPrO believes that before new infrastructure is developed, that better utilization of existing transportation routes should be fully explored.

Better utilization of existing routes may require a fresh approach. It is recognized that the current backhaul methodology does result in gas being transported a significantly longer distance than the more direct Dawn-Maple corridor, but

[4] Union Gas Presentation October 7-8 2010 Slide 24
[5] Union Gas Presentation October 7-8 2010 Slide 20

increased utilization of existing systems may be appropriate. The more traditional rate making that is greatly influenced by cost allocations and distance, would suggest that this longer route would attract a much higher toll, than the newer more direct route. Current rate making practices may be an artificial barrier to more efficient use of existing systems. A new approach to tolling whereby existing underutilized systems have the flexibility to depart from traditional toll making and recognize that some incremental revenues that have a positive contribution to fixed costs may be better than completely forgoing all revenue and visiting the fixed costs on captive customers.

If however such rate making flexibility is not available to better utilize existing systems, or capacity is not available, then APPrO believes that Ontario needs continued access to sufficient competitive supplies and therefore new infrastructure development should be facilitated. In these circumstances, it may be appropriate to assess expansion policies to ensure that alternatives have been considered, that there is equity and balance in the sharing of risks and rewards of such expansions and to help ensure that unintended consequences to do occur.

APPrO recognizes that the Board may not have jurisdiction directly over other inter-provincial and international pipelines to help encourage new approaches to rate making. APPrO does however believe that there are ways that the Board can have influence to create increased efficiencies either directly in its expansion policies for transportation companies under its jurisdiction or through indirect mechanisms often available.

Question 4: Further action the Board might take on its own or in conjunction with others

APPrO believes that artificial barriers should be reduced wherever possible to help ensure that Ontario has sufficient access to competitive supplies. Examples could include:

- The approval of minor facility expansions that facilitate the access to new supply basins
- The current rate distortions noted earlier may be also an example of such a barrier which prevents better utilization of existing systems.
- Encouraging pipeline and storage companies to operate efficiently to help enable access to new supplies.
- Work with other regulators where appropriate to increase the efficiency of the overall pipeline network.

Comments on Certain Positions made By Other Stakeholders in Their October 7/8th Presentations

1. Pipeline Expansion Criteria (7 Consumer Groups)[6]

   Given the changing supply dynamics it may be time to revisit the criteria to expand pipeline infrastructure under the Board's jurisdiction. For example, if new assets are developed for international customers that have access to multiple supply options then the risks of such facility expansions may be different than those risks for other customers situated in Ontario. It may be appropriate to revisit the expansion criteria to ensure that the right balance exists between risks and rewards among all parties. APPrO does not see that this requirement is necessary for expansions for Ontario loads.

2. Re-examine the delivery point obligations (7 Consumer Groups)[7]

   Union requires that some infranchise customers have an obligated delivery point at Parkway. Given the changing flow dynamics, it may be time to revisit this requirement to assess if this is still appropriate in all circumstances given the underlying system requirements. This obligation may have been based at least in part on traditional supplies arriving from the WCSB and the nature of Union's system configuration. Given the changing flow dynamics for gas supply it may be appropriate to reevaluate both the need for such obligation as well as the delivery points if such obligated delivery is necessary. By way of example if it is appropriate to continue to have an obligated delivery, for a customer situated in Hamilton should such customer have the option to deliver to a Union receipt point off the TCPL system in Hamilton rather than the customer have to deliver to Parkway. A Hamilton delivery point may meet both the system requirements as well as provide the opportunity to access lower priced supplies from Marcellus via Niagara or other regional supplies rather than having to pay the additional costs of getting the gas to Parkway.

3. Expansion Parkway to Maple (Union)[8]

   APPrO has previously noted in this submission that there may be alternative ways to physical expansion to meet certain market needs. In the event that such other options are unavailable, then APPrO supports the rational development of pipeline infrastructure to ensure Ontario has continued access to competitive supplies.

---

[6] Ontario Energy Board 2010 NATURAL GAS MARKET REVIEW EB-2010-0199 Prepared for Consumers Council of Canada, Canadian Manufacturers & Exporters, City of Kitchener, Federation of Rental-housing Providers of Ontario, London Property Management Association, School Energy Coalition, Vulnerable Energy Consumers Council, September 21, 2010

[7] Ontario Energy Board 2010 NATURAL GAS MARKET REVIEW EB-2010-0199 Prepared for Consumers Council of Canada, Canadian Manufacturers & Exporters, City of Kitchener, Federation of Rental-housing Providers of Ontario, London Property Management Association, School Energy Coalition, Vulnerable Energy Consumers Council, September 21, 2010

[8] Union Gas Presentation October 7-8 2010 Slide 24