Industrial Gas Users Association

Submission To

The Ontario Energy Board

Natural Gas - Electricity Interface

General

The Industrial Gas Users Association (IGUA) appreciates the opportunity to provide input on behalf of its members into the planning for the connection of gas-fired power generation facilities to help meet Ontario's electrical energy supply requirements. IGUA believes strongly that the potential impact of the construction and operation of a number of large power plants on existing natural gas consumers in Ontario must be taken into consideration when deciding on the terms and conditions to apply to the provision of gas LDC delivery services to the power generators..

IGUA was established in 1973 to represent industrial natural gas users before regulatory tribunals and governments at both the national and provincial levels. IGUA continues to provide a coordinated and effective voice for member companies located in Manitoba, Ontario and Quebec all of which are major users of natural gas as a fuel or feedstock. IGUA has 45 members, grouped in five categories: Pulp & Paper, Metals, Mining & Smelting, Chemicals and Other. Thirty four IGUA members are located in Ontario and they expect to consume about 75 Bcf of gas in 2005. These companies directly employ about 40,000 Ontario residents and by extension, another 300,000 to 400,000 jobs in Ontario are supported by IGUA member activity in the province**.**

Potential Impact of Power Generator Natural Gas Supply and Transportation Contracts on Industrial Gas Users

IGUA has concerns with respect to the contractual arrangements the new power projects may be making in respect of acquisition of gas supplies and of transportation upstream of the gas LDC franchise area. IGUA believes that there is a disconnect between power generation planning and the realities of the natural gas transportation and distribution system. IGUA is not particularly concerned about the impact of the announced projects in the Lambton county area as they are close enough to the storage and supplies of the Dawn Hub to have little impact on the rest of the pipeline transportation and gas distribution operations. That cannot be said, however, for the plants to be located East of Dawn, especially those to be constructed in the GTA - Golden Horseshoe region ["GTA/GH"].

Currently, the natural gas distributors (Enbridge Gas Distribution ["EGD"] and Union Gas ["Union"]) do not contract for sufficient gas supplies to meet winter peak day demand levels. Rather, they rely on storage deliveries, plus the ability to curtail interruptible industrial customers when necessary, to supplement day-to-day pipeline deliveries into the GTA/GH. Industrial consumers contract for interruptible service because it is less expensive than firm service and because they can accommodate the expected number of days of curtailment in the winter. The curtailment of industrials have, to-date, been driven by weather-related conditions as well as security of system supply considerations [the need to re-fill storage following a sustained cold spell when storage volumes have been drawn down to levels which would limit future storage withdrawal volumes]. Interruptible industrials accept the levels of curtailment they have been facing, can plan their energy requirements on that basis, and would continue to contract for interruptible service if the economics continue to make that a prudent decision.

Currently, the gas supply and market conditions that can give rise to curtailment conditions are experienced only in the winter, during periods of peak cold weather and/or heavy gas storage withdrawals. Curtailments would occur in the summer months only if there was a serious pipeline outage situation upstream of the LDC franchise area. The introduction of a large number of dispatchable electric power generation facilities designed to primarily serve the peak summer air conditioning load introduces the prospect of curtailments of interruptible natural gas customers in the summer, possibly for extended periods (during prolonged hot spells such as was experienced in 2005), on top of the winter curtailment practice.

IGUA is therefore concerned that the gas supply, pipeline transportation and distribution arrangements needed to serve the new power generation market will disrupt the current level of service for industrial users of gas, if provisions to protect the current gas market dynamics are not addressed. Specifically, the gas supply and transportation arrangements needed for new power generation must be designed and <u>mandated</u> to ensure the attachment of the new power generation market does not cause increased interruptions of industrials. Such increased interruptions could occur if power generators are not required to deliver to the LDC franchise area the daily volumes of gas needed to operate the power plants.

Power generators should not be permitted to merely deliver gas to the LDC at Dawn, when there is insufficient transportation between Dawn and the GTA/GH to serve both the non-power generation market and the power plant needs. If the total gas demand in a given area exceeds the supplies of gas available in that area, the LDC must do something to balance gas receipts with gas deliveries. The LDC is required to serve residential, commercial and institutional markets first, without curtailment. Therefore, if the combined industrial and power generation gas demand exceeds the remaining gas supply, the LDC would have to curtail customers using interruptible service.

It is unacceptable to IGUA's members that interruptible industrial customers should face increased curtailments caused by the power generation sector. Presumably, the power generators expect to receive natural gas to operate their generating plants as and when required. However, unless they are required to hold some form of firm service at the LDC level, including a requirement that the power generation customers deliver to the LDC the full gas supply required by the power generators, there will be a disconnect between power plant operation and the traditional operation of the gas LDC systems.

If industrials experience increased curtailments of deliveries of natural gas, the following is likely to result:

- Some industrials will switch from interruptible service to firm, reducing the flexibility of supply currently enjoyed by the LDCs from this class of service.

- Some industrials will find the increased costs for gas supplies, coupled with greater risk and frequency of interruptions unacceptable, and will therefore either reduce Ontario-based operations or close down completely.

- Some industrials will switch permanently to an alternative fuel, typically coal or heavy fuel oil.

The risk of increased interruption of the industrial sector would be removed if the power generation sector is required to deliver sufficient gas volumes to the LDC franchise area on days when they are operating and have transportation at the LDC level. This requires two things:

(1) That the power generation companies contract for sufficient firm gas supplies to meet their operating load requirements.

and

(2) That the power generation companies contract for firm pipeline transportation capacity to permit firm delivery of gas supplies to the LDC franchise area and capacity at the LDC level to deliver to the plants.

Recommendations

In evaluating future power generation load requirements and the services the natural gas LDCs will provide to the power generators, the OEB must consider addressing the following impacts on each sector of the gas industry, including investment and operating practices, and the potential overall impact on the end users in Ontario.

❶ Transportation

Pipelines that transport gas to Ontario will need to be expanded to accommodate the increased throughput. In addition, if the new power plants are not on-line at all times (which we understand will be the case), then pipeline capacity dedicated to their service will be idled when the power plants are off-line. The short-notice nature of the power plant operations will likely preclude use of that pipeline capacity during off-periods by other pipeline users. Someone has to pay for carrying that pipeline capacity when it is not being used to serve the power market. The issue is to ensure that the pipeline tolls paid by the power generators will recover all of the pipeline transportation costs associated with the services provided to the power plants, such that other shippers are not required to unduly subsidize the power generators.

IGUA recognizes that the tolls charged by TransCanada PipeLines Limited are under the jurisdiction of the National Energy Board. IGUA will be addressing its concerns regarding TCPL's services offered to power generators in the TCPL tolls task force and at the NEB, if necessary. However, equally important to the delivery of gas into the central and eastern regions of Ontario is the Union Dawn - Trafalgar Line, the tolls for which are subject to the OEB's jurisdiction. An expansion of the Dawn - Trafalgar line to meet a power generator's request for service should be treated no differently than an expansion to serve any other customer - that is, its costs should be rolled-into the existing pipeline rate base. The rate charged to the power generator should also be the same M12 rate as paid by all other customers, reflecting a firm 100% load factor demand charge. However, if the service to be provided to the power generator would be different from that offered other M12 customers, then it is probable that a separate rate design would be appropriate, reflecting the full costs of the provision of that specialist service.

With the new power company loads, TransCanada will probably operate at load factors higher than at present. While this will result in lower firm service tolls for all pipeline users, it will also mean that there will be less scope for the pipelines to offer other services, including interruptible service and diversions, which are today important components of the pipeline services used to meet Ontario's natural gas market needs. Customers who currently use interruptible pipeline capacity to move some or all of their Western Canadian gas supplies to Ontario, including industrial consumers, will be faced with a reduced availability of interruptible service for meeting traditional requirements. That will translate into higher costs, as interruptible service is sold on a biddable basis and higher bid prices are inevitable. The alternative – contracting for firm service – also entails higher costs as demand charges are incurred 24/7 regardless of throughput usage.

❷ Storage

If storage becomes a key element for the gas-fired generators, as some are suggesting, then further investment in new storage capacity will probably be needed to meet the power sector's requirements for storage space, including provision for the necessary rates of injection and withdrawal.

Traditionally, it has been the LDCs, or their affiliates who have made the investments required for storage facilities, largely on the strength of the needs of their franchise gas supply requirements, and on their ability to recover storage costs in the distribution rates. Because of the linkage between storage development and cost recovery through the rate structure, in-franchise customers pay cost-based rates for storage services required to meet in-franchise requirements. Recently, however, other players have entered the storage development field. This has at least in part been fostered by the OEB's ruling, several years ago, that storage charges for non-franchise customers could be charged at unregulated, market-based rates.

The introduction of the potential for sizeable new storage requirements for power generators gives rise to the question of who should pay for the cost of providing such incremental storage, if the power generation facility is being served by the natural gas LDC[1]. It is IGUA's view that treatment of such costs must be consistent with the treatment of storage costs for other LDC in-franchise customers, while at the same time minimizing the potential for other LDC customers to subsidize the power generators.

The Natural Gas Forum showed that there is some support for the OEB forbearing with respect to regulation of storage. This would mean that the OEB would no longer regulate storage and the LDCs would be able to offer storage at "market rates", currently about twice the cost of the regulated rates. IGUA believes that the OEB should continue to regulate storage until it can be demonstrated that the costs related to providing storage to the power generation sector are not being unreasonable borne by non-power sector customers. Any expansion of storage capacity will benefit all Ontario natural gas customers, thus some sharing of costs is not unreasonable. But we do not accept that existing gas customers should be required to bear the cost of market-based rates merely on the strength of an argument that it requires the elimination of cost-based rates to foster the development of the new storage assets and capacity the power generation market may require. We note that it is 'conventional wisdom' that if all Ontario storage were offered at market-based rates, then all Ontario consumers would face increased costs, either directly or through balancing charges included in bundled rates.

❸ Distribution

The impact at the distribution level of the new power projects will depend to some extent on where the generating facilities are located. Plants located close to the Dawn storage fields should have little, if any, impact on Union Gas, other than to note that changes will

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1 It is assumed that if the power generation station has been approved to by-pass the natural gas LDC, all costs involved in the delivery of gas to the power plant will be borne by the power plant operators, including any storage costs.

be required to certain gas distributor operating practices, if the provisions of the current CES contracts are applied to the terms and conditions of gas delivery service to the power projects. Changes to current operating practices will involve the nomination process [how customers nominate for their gas service needs, currently on a day-ahead basis], customer balancing requirements, and perhaps most importantly, the LDCs own gas supply management operations.

Generating facilities located in either the Enbridge or Union franchise areas in the CDA or EDA will require that special terms and conditions be established governing the provision of gas LDC services to the power plants, in order to minimize negative impacts on other LDC customers. The gas LDCs located in the GTA/GH will have to put measures in-place to allow them to meet the very short-notice gas service requirements of the power generators, while at the same time not disrupting service to the rest of their customers. These changes should include the appropriate conditions governing the upstream pipeline delivery requirements the power plant operators must undertake, and they may also need to address access to storage on a daily basis to accommodate balancing requirements.

IGUA considers it important to ensure that such changes can be implemented in a manner that other customers are not adversely impacted before placing too much reliance on gas-fired generation.

Conclusions

It is evident that the creation of a large, new demand for natural gas in Ontario could introduce disruptive changes to the existing natural gas delivery processes and practices in the province, if measures are not put in-place to minimize these disruptive impacts. The changes include the possibility of substantial investment required to expand pipeline, storage and distributor facilities to deliver the large incremental volumes represented by the new power plants, as well as substantial impacts on traditional operating practices.

Considerable effort will be required to minimize disruptions to current consumers and to ensure that they are not required to unreasonably subsidize the growing power generation segment. IGUA believes that, at a minimum, the OEB should ensure that the terms and conditions governing the connection of the new power plants to the natural gas distribution grid require, at a minimum, the following:

(1) That the power generation companies demonstrate to the gas LDC that they have contracted for sufficient firm gas supplies to meet their full operating load requirements, as a condition precedent prior to the signing of a distributor service contract;

and

(2) That the power generation companies be required to contract for sufficient firm pipeline transportation capacity, with a delivery point in the LDC franchise area where the power generation facility is located, to ensure that the power plant operators will not draw upon gas from the LDC's supplies to meet the power generator peak load requirements.

That is, there must be a certainty that the power station operators have contracted for a sufficient supply of gas and have contracted for its transportation to and delivery into the gas LDC franchise area in order to permit the LDC to deliver sufficient gas supplies to the to the power plants without impacting other LDC customers. In IGUA's submission, this can be achieved by establishing certain terms and conditions in the LDC's tariff which the power generators would be required to meet prior to qualifying for the LDC service.

Submitted on behalf of
The Industrial Gas Users Association

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