



BRITISH COLUMBIA  
UTILITIES COMMISSION

ORDER  
NUMBER.....C-5-92.....

IN THE MATTER OF the Utilities Commission  
Act, S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF an Application by  
BC Gas Inc.

BEFORE: J.G. McIntyre, )  
Chairman; )  
J.D.V. Newlands, ) June 30, 1992  
Deputy Chairman; and )  
N. Martin, )  
Commissioner )

**O R D E R**

**WHEREAS:**

- A. On February 21, 1992 pursuant to Section 18 of the Utilities Commission Act ("the Act"), BC Gas Inc. ("BC Gas") submitted an Energy Project Certificate Application to the Minister of Energy, Mines and Petroleum Resources ("the Minister") to construct and operate a 24.3 km, 1,067 mm (42-inch) natural gas transmission pipeline from its Balfour gate station in Langley, B.C. to its Nichol gate station in Surrey, B.C. ("the Application"); and
- B. The Minister and other interested government agencies have reviewed the Application. The Minister conveyed the "Summary of Agency Comments and Requests for Additional Information" in a letter dated May 11, 1992, to BC Gas; and
- C. On June 2, 1992, pursuant to Section 19(1)(b) of the Act, the Minister referred the Application to the Commission for a Certificate of Public Convenience and Necessity ("CPCN"); and
- D. The Commission by Order No. G-52-92 required BC Gas to publish a Notice in newspapers asking persons who have an interest in the Application to comment in writing to the Commission by June 29, 1992; and
- E. The Commission reviewed the Application and the written comments received from the public and has determined that the construction and operation of the natural gas transmission line is necessary for the public convenience and properly conserves the public interest.

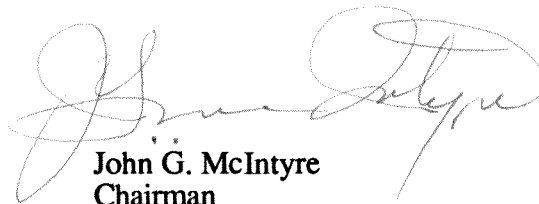
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**NOW THEREFORE** the Commission orders as follows:

1. Pursuant to Section 51(6) of the Act a CPCN is granted to BC Gas to construct and operate a 24.3 km, 1067 mm (42-inch) natural gas transmission pipeline from its Balfour gate station in Langley to its Nichol gate station in Surrey, B.C., along the proposed route identified in the Application.
2. BC Gas will be bound by the various directions contained in the Reasons for Decision to be issued separately from this Order. The Reasons for Decision will include provision for general project oversight and progress reports.

**DATED** at the City of Vancouver, in the Province of British Columbia this 30<sup>th</sup> day of June, 1992.

BY ORDER



John G. McIntyre  
Chairman

/mmc

BC Gas Inc.  
Application for Certificate of Public Convenience and Necessity  
In the matter of a Langley-Surrey 42" Pipeline Looping Project ("the Project")  
and  
Commission Order No. C-5-92

**REASONS FOR DECISION**

**1.0 PROCESS**

A number of questions have been raised regarding the review process for the Project. Accordingly, the Commission wishes to comment on the process generally as a preamble to its Reasons for Decision.

A natural gas transmission pipeline capable of transporting more than 16 PJ per year of energy, regardless of length, requires an application pursuant to Section 18 of the Utilities Commission Act ("UCA") to the British Columbia Ministry of Energy, Mines and Petroleum Resources ("MEMPR") for an Energy Project Certificate ("EPC") before it can be built. Such an application was filed by BC Gas Inc. for the Project on February 21, 1992.

MEMPR oversees a review by a broad range of government agencies in order to determine the disposition of the application. The application must be complete and cover project justification, environmental issues, land use, safety and other relevant matters. If, for example, the review indicated environmental or land use concerns, MEMPR could refer the application to the Commission for a public hearing. On conclusion of this hearing, the Commission would present a report and recommendations to the Lieutenant Governor in Council.

Alternatively, if the review indicates few or minor concerns, the MEMPR can, in the case of a regulated utility such as BC Gas, refer the application to the Commission for consideration as an application for a Certificate of Public Convenience and Necessity ("CPCN") pursuant to the UCA [S 19.(1)(b)]. This was the case for the Project where the government referral occurred on June 2, 1992. In this circumstance, the need for further review was left to the discretion of the Commission.

In assessing the need for further review in this case, the Commission took into account a number of factors. First, the Commission had received correspondence from a few affected land owners dating back to December of 1991. Secondly, the Commission was aware of concerns about the

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justification of the Project raised by Intervenor in the BC Gas Revenue Requirements hearing which commenced on March 30, 1992 and concluded on June 4, 1992 ("the Hearing"). Thirdly, the Commission was aware of the need for BC Gas to commence construction in early July, 1992 if the Project was to be in service for the winter of 1992-93. Finally, the Commission recognized that there were relatively few concerns remaining after the EPC review. Based on the consideration of these factors, the Commission determined that a combination of further staff investigation together with an action to ensure that all concerns were known to it would be appropriate. By Order No. G-52-92, the Commission required BC Gas to publish a notice in local newspapers requesting comments on the Project from any interested parties. At the same time, the staff investigation of the Project which had been ongoing on an informal basis since December of 1991, in anticipation of an eventual referral from MEMPR, was accelerated.

## **2.0 CONCERNS**

### **2.1 Affected Landowners**

BC Gas reported that of approximately 30 landowners affected by the requirement for new rights-of-way, settlement had been reached with 23, leaving 7 outstanding as of the beginning of June, 1992. Of the 7, two had expressed their concerns to the Commission in early December, 1991. As a result of these concerns, Commission staff investigated the matter with BC Gas and came to the preliminary conclusion that remedies were available if the landowners were prepared to discuss their concerns in detail with BC Gas. The matter was revisited by staff in June, 1992 when one of the two concerned landowners met with staff to reiterate his concerns. The Commission was subsequently advised that this particular landowner chose not to discuss his concerns with BC Gas and adopted the position that the proposed new right-of-way was unacceptable in any case. The Commission is satisfied that BC Gas has made reasonable efforts to address the concerns of affected landowners. The Commission regrets that these efforts have not been successful in all cases, but encourages all parties to continue settlement discussions to avoid the process of expropriation.

In the event that settlements have not been reached prior to BC Gas needing to commence construction activities on the affected properties, the Commission is prepared to consider granting BC Gas access rights under Section 23 of the Gas Utilities Act.

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## **2.2 Government Review**

BC Gas filed an action plan in response to the comments of government review agencies who participated in the EPC review process. Most of the comments dealt with the need for a variety of government agencies to be involved during and after construction and the specific need to set up the appropriate communications with key contacts in those agencies. In reviewing the government agency comments, the Commission noted that from an environmental perspective, the government agencies concerned were of the opinion that the potentially adverse impacts of the Project could be mitigated with known technology and that the Project could proceed. With respect to public consultation on environmental and land use matters, BC Gas undertook a program that was extensive in scope. (In fact, MEMPR has since directed recent applicants for EPC's to BC Gas for advice on how to conduct a local public consultation program.) BC Gas contacted landowners directly and indirectly affected by the pipeline, local businesses, municipal governments, local interest groups, ratepayer groups representing core market customers and aboriginal groups. BC Gas received feedback from the public and used the information in developing the Project. The Commission is satisfied that any concerns pertaining to public consultation, land use or socio-economic aspects of the Project have been addressed satisfactorily by BC Gas.

In the case of the Municipality of Surrey, a number of specific concerns arose relatively late in the review process. These were reviewed by Commission staff in discussions with representatives of Municipality and BC Gas. These discussions culminated when the Municipality filed a letter of understanding dated June 29, 1992 with the Commission. The Commission is satisfied that the understandings contained in that letter are in the public interest. BC Gas is directed to enter into formal agreements with the Municipality of Surrey regarding costs and concerns raised in the letter and attachments thereto (Appendix A).

## **2.3 Other Interested Parties**

Both the British Columbia Public Advocacy Centre ("BCPIAC") and the Lower Mainland Large Volume Gas Users Association ("LMGU") wrote to the Commission in late June, 1992 to reiterate concerns that they had expressed earlier during the Hearing. In summary, these concerns were that the Project had not been adequately justified and should not go ahead. The LMGU retained a consultant to provide a detailed expert opinion in support of its concerns.

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The Commission concurred with the views of the BCPIAC and LMGU with respect to the inadequacies of material filed by BC Gas for the EPC process in support of project justification. Commission staff had attempted to have BC Gas address some of the more fundamental information deficiencies by way of an information request prior to the Hearing. At that time, it was expected that the EPC process would be relatively short and that the referral for a CPCN would occur in time for the Project justification to receive detailed scrutiny at the Hearing. Such was not the case, and upon receipt of the CPCN referral on June 2, 1992, the Commission was faced with a project which had still not been justified in sufficient detail.

To address this shortcoming, and mindful of the need to commence construction in early July if the Project was needed for the 1992 winter, the Commission directed staff to work closely with BC Gas to review a detailed justification. The Commission acknowledges the focus for this process which was provided by LMGU's consultant. The results of the review are discussed in detail in the following sections.

### **3.0 PROJECT JUSTIFICATION**

The deficiencies in the filed material related to project justification can be considered in terms of the following factors:

#### **3.1 Supply Pressure**

The BC Gas transmission system is designed for a maximum operating pressure of 585 psig. The most efficient operation of the system requires a Westcoast Energy Inc. ("WEI") minimum supply pressure of 600 psig allowing for a 15 psig pressure drop across the BC Gas main supply station at Huntingdon. However, the WEI contract has historically provided a minimum supply pressure of 500 psig due to WEI operating constraints. If this supply pressure could be increased at a low enough cost, a lower cost alternative to the 42" loop could be constructed.

This matter had been raised over the years by BC Gas and the WEI response had always been that it could not be done. This position, which was reiterated in response to the staff information request prior to the Hearing, continued to beg the question as to what the cost of providing the 600 psig would be. Through further efforts of Commission staff, WEI provided a cost estimate in

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a letter dated June 17, 1992. A comparison of this cost and the accompanying reduced looping cost for BC Gas demonstrated that this was not a cost effective alternative and that the 42" loop was the lowest cost alternative.

A final matter related to supply pressure was that WEI had a history of not meeting their minimum contract commitment of 500 psig. Information filed by BC Gas on June 28, 1992 showed that, over the past 3 years, WEI pressure was below 500 psig 39 times for one or more hours during the day in the critical winter months of November to February. For 5 of these 39 days, the average pressure for 24 hours stayed below 500 psig. The effect of these shortfalls in supply pressure is to reduce system capacity and the ability to deliver natural gas to customers. The Commission recognizes that BC Gas has not considered this matter in modeling the system and that it is a factor which would tend to offset high load forecasting or severe design criteria.

### **3.2 Delivery Pressure**

Delivery pressure assumptions are a second factor in determining the need for the Project. In particular the delivery pressure to the Pacific Coast Energy Corporation ("PCEC") pipeline to Vancouver Island was determined to be the critical factor requiring 1992 construction of the Project. Supply to Greater Vancouver could only be maintained by using Liquefied Natural Gas ("LNG") to augment system capacity if no loop was constructed.

The PCEC delivery pressure had been established by contract at 366 psig. At this pressure, and with full use of LNG, BC Gas could not supply PCEC without construction of the Project. In order to more fully evaluate the options, Commission Staff requested PCEC to advise if this pressure could be reduced and what the cost implications of that reduction were. PCEC's response to this question in March of 1992 was that reductions were not feasible based on load information available at that time. The question was raised again in June, 1992 and this time PCEC advised, in a letter dated June 30, 1992, that based on information received from their customers, some minor reduction in load was expected and that a reduction in pressure to 300 psig would be possible at the expense of additional fuel costs.

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BC Gas ran this revised information through their model and again confirmed that the Project was required to meet this flow and pressure even with the maximum use of LNG. The LNG issue will be discussed more fully later in these Reasons. The Commission is satisfied that on the basis of delivery pressure, the Project is required.

### **3.3 Demand Forecast**

A third factor in determining the need to increase system capacity was the demand forecast. If the forecast was overstated, or if assumptions about where load growth would develop were incorrect, the need for system capacity increases might be overstated. The Commission recognizes the complexity of the demand forecast process and that it is judgemental in nature. In recent years, the use of non-traditional gas appliances has increased substantially and much of this load growth in areas such as cooking and fireplace loads can directly affect the peak hour load. On the other hand, demand side management ("DSM") programs which the Commission expects BC Gas to provide in future, may eventually more than offset these increases in use per account, although at present there is little evidence about the effect of DSM programs on peak hour loads.

In an attempt to address the uncertainties of the demand forecast, Commission staff requested BC Gas to undertake a sensitivity analysis of their overall load growth projections. Results were provided in a June 28, 1992 filing by BC Gas and indicated that it would take a reduction in the assumed compound growth rate from 2.2 percent to 1.75 percent over twenty years before the next least cost alternative - the 36" loop - would become economically viable. The Commission recognizes also that the introduction of new large firm loads or cogeneration projects could result in load growth being underestimated. The Commission concludes that the sensitivity analysis confirms the need for the 42" loop.

### **3.4 Design Criteria**

A fourth factor in determining the need for increased capacity was the design criteria. Even the existing system would meet load and pressure criteria at some temperature, the question was whether the selected design temperature was the appropriate one. In the case of BC Gas' lower mainland division, the design criteria had been implicitly accepted in the consideration of previous CPCN applications, and therefore it has not been specifically reviewed.

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The design criteria is based on a design philosophy which, in this case requires that the system be capable of delivering gas at the coldest temperature which might occur. The design temperature of  $-15^{\circ}\text{C}$ , which is assessed on a peak hour basis, has occurred twice in the last 42 years and lastly in the winter of 1968-69. The selection of this criteria raised the issue of its compatibility with gas supply criteria. In the case of the lower mainland, the gas supply criteria was based on the coldest winter in the last 20 years therefore excluding 1968-69. That raised the question of the value of the capacity if there was no gas supply. BC Gas responded that on extreme cold days, gas supply would be available if the purchaser was prepared to pay a sufficiently high price. The Commission accepts this position given the current market conditions but is aware that under certain circumstances, WEI transportation capacity constraints might require unauthorized overrun gas to be taken by BC Gas. In any event, BC Gas made the converse argument that, if their transmission capacity is insufficient for the extreme cold days, then no expenditure will assure deliveries to firm customers. The Commission believes the extreme value approach taken by BC Gas for determining their design criteria is prudent.

For this project, the Commission concludes that the choice of a  $-15^{\circ}\text{C}$  design criteria is not critical to the decision to proceed in 1992. Even if the criteria were reduced to say,  $-11^{\circ}\text{C}$  which has occurred nine times since 1948-49, and as recently as 1990-91, BC Gas would only meet the reduced PCEC pressure of 300 psig with full use of LNG for system capacity. While this is not a realistic design scenario, it has been reviewed to better assess the significance of the design criteria to this particular justification.

### 3.5 Use of the LNG Facility

In approving the BC Gas gas supply portfolio over past years, the Commission approved the use of the LNG facility to offset the need for additional winter gas supplies on the basis that this was the least cost approach. Alternatively, because of its geographical location close to the load centre, the LNG facility could be used to reduce the need for system capacity increases and hence potentially permit deferment of looping projects. As already discussed here under 3.2, the use of LNG would not enable BC Gas to postpone the Project.

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Because of intervenor concerns however, the Commission decided to review this long standing practice and directed BC Gas to provide an estimate of costs to replace LNG with more traditional gas supply contracts. Based on information filed by BC Gas on June 23, 1992, the annual cost to revise their planning strategy, so that the LNG facility is dedicated to system capacity augmentation, would be in the order of \$60 million per annum for additional long-term gas supply arrangements. Even if this cost were reduced substantially by substituting short-term interruptible supplies for firm supplies and risking a shortfall to firm customers, the cost is estimated to be \$10 - 18 million per year. The Commission does not believe that these costs and/or risks are appropriate for service to the core market customers. The Commission recognizes that as the need for increases to system capacity draws closer, it is prudent for the utility to balance costs by dedicating portions of the LNG facility to augment system capacity. This was the case for the lower mainland in the winter of 1991-92. The Commission continues to believe however, that the best use of the LNG facility on a long-term basis is for peak load gas supply.

### **3.6 Hydraulic Simulation**

Ultimately, having considered the five factors discussed above, the project justification hinges on the accuracy of the modelling predictions.

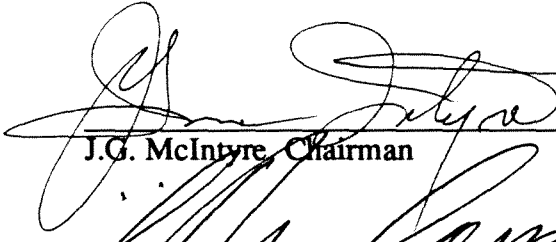
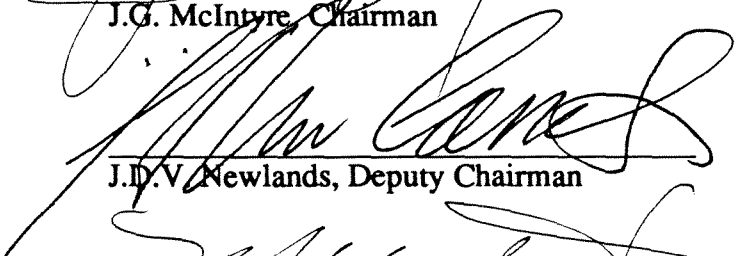
This subject was questioned at length by the consultant retained by the LMGU. His concerns centred around the fact that recent BC Gas simulations were at relatively low throughput conditions and hence there was no filed evidence of the model's ability to accurately simulate design conditions. In an effort to address this concern, BC Gas conducted a search of their archive material back to 1982, since the system was essentially unchanged since that time. BC Gas filed information on June 26 and June 28, 1992 which demonstrated that the model had provided accurate overall simulations at approximately 72 percent of design load in 1987/88 and 70.5 percent of design load in 1986/87. In a simulation of one leg of the system in 1989, accuracy was confirmed at virtually 100 percent of design load. The Commission accepts this evidence as verification of the accuracy of the hydraulic model.

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#### 4.0 SUMMARY

The Commission concludes that in the case of the Project, concerns have been adequately addressed and the project is required for the public convenience and necessity before the winter of 1992/93. On that basis the Commission issued Order C-5-92 dated June 30, 1992 awarding a CPCN to BC Gas for construction of the Project. BC Gas is directed to file monthly progress reports to the Commission. Based on these, the Commission may decide to implement more general oversight activities.

DATED at the City of Vancouver, in the Province of British Columbia, this *9th* day of July, 1992.

  
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J.G. McIntyre, Chairman  
\_\_\_\_\_  
J.D.V. Newlands, Deputy Chairman  
\_\_\_\_\_  
N. Martin, Commissioner



DISTRICT OF SURREY  
Clerk's Department

14245 - 56th Avenue, Surrey  
British Columbia, Canada V3X 3A2

Telephone  
(604) 591-4131

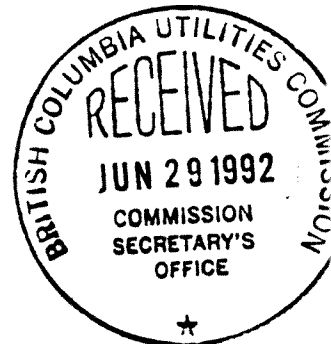
DONNA B. KENNY, Municipal Clerk  
MARGARET JONES, Deputy Municipal Clerk

Fax  
(604) 591-873

June 29, 1992

File: 1157-001

Mr. Robert J. Pellatt  
Commission Secretary  
British Columbia Utilities Commission  
6th Floor, 900 Howe Street  
Vancouver, B.C.  
V6Z 2N3



Dear Mr. Pellatt:

**Re: BC Gas Surrey/Langley Natural Gas Pipeline Project**

In response to the Public Notice of June 12, 1992, inviting comments on the Surrey/Langley 1,067mm diameter transmission pipeline project, the Corporation of the District of Surrey presents the accompanying Submission for the favourable consideration of the Commission.

We confirm that Surrey Council has been fully advised of the impacts and the solutions established and has, at the Special Council meeting on June 29, 1992, passed a resolution that:

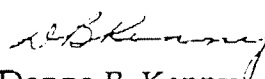
"Subject to the works and procedures identified to be necessary for mitigation of the impacts of the proposed 1,067mm (42") diameter gas pipeline on:

- a) existing and future Municipal infrastructures
- b) existing public rights-of-way and Municipal road allowances
- c) environmental concerns and effect on adjacent properties

being undertaken at the expense of BC Gas, the construction of the pipeline across Surrey on the route proposed by BC Gas be accepted."

We will be pleased to provide additional information including presentation to the Commission to further elaborate this Submission. The contact person within the District of Surrey for this pipeline project will be To-hin Lau, P.Eng., Assistant Municipal Engineer/Design. His telephone number is (604) 591-4382 and fax number (604) 591-8693.

Yours truly,

  
Donna B. Kenny  
Municipal Clerk

bcc: J.G.McIntyre  
J.D.V.Newlands  
N.Martin  
W.J.Grant  
R.J.Pellatt  
M.Donn  
D.W.Emes  
P.H.Gronert  
S.S.Wong  
P.Nakoneshny  
R.Brownell

THL/dr  
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**SUBMISSION TO  
BRITISH COLUMBIA UTILITIES COMMISSION****in Respect of  
The Proposed 1,067mm Diameter Gas Pipeline  
from Balfour Station in the Township of Langley  
to Nichol Station in the District of Surrey**

This is a submission from the Corporation of the District of Surrey (hereinafter referred to as "Surrey") in response to the Public Notice of June 12, 1992, from the Commission inviting comments on the Surrey/Langley 1,067mm diameter transmission pipeline project.

**Summary**

Surrey fully appreciates the need and timing of this pipeline project and have significant concerns on the impacts from this proposed pipeline on the Municipality. Through cooperative working and consultation with the BC Gas project team, technically feasible solutions have been established to address the impacts on existing and future Municipal infrastructures, and procedures are being developed to cope with environmental problems and other emergencies.

Surrey respectfully submit to the Commission this request for the full costs of constructing all the currently identified provisions to accommodate all the existing and future Municipal infrastructure and other impacts to be borne by BC Gas.

**Background Understanding of Project**

In the summer of 1991, BC Gas advised Surrey of the need for a large diameter high pressure transmission gas pipeline from the Balfour/Livingston Station in the Township of Langley to Roebuck/Nichol Station in the District of Surrey. The Ministry of Energy, Mines and Petroleum Resources (MEMPR) invited comments on the Prospectus of this pipeline, as the first step of the Energy Project Review Process (EPRP).

Close liaison was established between BC Gas and Surrey's Planning and Engineering Departments on general criteria and constraints as input towards the choice of the best route among the five (5) identified alternatives.

On February 20, 1992, Surrey was advised on the decision of the choice of the route and concurrently, MEMPR invited comments on BC Gas' Energy Project Certificate application. Surrey advised MEMPR briefly of the concerns and confirmed that the proposed pipeline project and possible impacts were being reviewed with further comments to be provided later.

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### Technical Review

On February 24, 1992, Surrey Engineering Department, in conjunction with BC Gas, established a technical review process to examine in detail the possible impacts of this proposed pipeline on both the existing and future Municipal infrastructure such as roads, water mains, storm and sanitary sewer systems. The extremely short available lead time for the completion of the project was demonstrated by the proposed tendering in mid-April of 1992 leading to completion before the oncoming winter.

Basically, Surrey's concern was that the presence of this pipeline will form an impassible underground barrier with an effective height of 2 metres. Both Surrey and BC Gas fully realized that a pipeline of this magnitude and functional importance would not be easily relocated to make way for future Municipal infrastructures, even some of them will have to be designed for gravity operation with very narrow latitude in design elevations. Any relocation, even if warranted, will be extremely laborious and costly, and potentially impractical, not to mention the disruption to the operation of this transmission pipeline.

Surrey Engineering and BC Gas project team agreed that the most practical solution would be the initial location of the pipeline at levels which will avoid all existing underground services and provide suitable clearances for future infrastructure to reasonably pass above or below it.

This technical review process followed the progress of the design and preparation of construction drawings closely and was completed in early June, with all significant impacts on existing and future Municipal infrastructure identified and technical solutions established.

For existing Municipal rights-of-way, a total of 34 locations were identified where the pipeline could impact the Municipal infrastructure. These 34 locations can be considered in 3 groups:

- 25 locations presented no problem as the depths required for the proposed pipeline to clear the existing services will accommodate future services,
- 4 locations will need minor lowering of the proposed pipeline to accommodate future services, and
- 5 locations will require significant lowering of the pipeline over much extended distances to accommodate anticipated road widenings and future major dykes and drainage tie-ins needed to drain highland and lowland water into the Serpentine River. The order of costs for such lowering, based on our understanding with BC Gas, could be up to \$0.5 million for each location. Such high cost is principally due to the anticipated difficulty in excavation including extensive dewatering required at these lowland locations.

The probable costs of the above provisions could be in the order of \$2 million. Our position is that such costs should be borne by BC Gas and should not be a burden on Surrey.

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The probable costs of the above provisions could be in the order of \$2 million. Our position is that such costs should be borne by BC Gas and should not be a burden on Surrey.

### **Non-Technical Concerns**

BC Gas' Energy Project Certificate application addressed in detail the impacts on land uses, adjacent property owners, the general neighbourhood and on the environment. Among these several major categories of issues, impact on future land use and the protection of the environment are of paramount concern to Surrey, assuming that the impacts on the neighbourhood of the pipeline route will be adequately dealt with by BC Gas directly with the affected residents.

### **Land Use Planning**

Surrey identified that the land adjacent to the gas pipeline route between the Langley border and 182 Street as well as between 180 Street and 164 Street could possibly be developed at some future time. It would be premature for conceptual layout for future road patterns to be established for possible development on these privately owned areas. Rather than lowering the entire pipeline to allow full flexibility in the planning of future road layouts, Surrey is prepared to commit to having future roads to cross the proposed pipeline at locations approximately 200 metres intervals, to conform to the generally acceptable street block pattern. This will restrict the necessary lowering of the pipeline to provide a cover of 1.8 metres at only these committed future road crossings to allow reasonable clearance for future services to pass above the pipeline. This arrangement was acceptable to BC Gas technically, but they suggested that the additional costs involved should be recouped through a suitable "deferral account" system from future users/developers who are required to establish such future roads and services.

Such costs are in the order of \$15,000 per crossing, or a total of \$270,000 for the 18 probable crossings. Since it is the initiative of BC Gas to install this pipeline, we believe that such costs and any attendant "deferral account" should be borne by BC Gas.

### **Environmental Impacts**

The Environmental Impact Assessment (EIA) included in the Energy Project Certificate application identified the environmental issues and concerns that may arise during and after the construction of this pipeline. An Environmental Protection Plan (EPP) is being developed by BC Gas with input from Surrey. We want to be assured that the EPP eventually developed will fully address the concerns identified under the EIA.

Surrey's particular concern is on the establishment of a response procedure to cope with any environmental problem promptly and effectively, especially during construction. Given the mandate of fast-tracking towards a completion deadline by the oncoming winter, there could be situations where immediate environmental problems could be overtaken by the momentum of the construction progress without being given the necessary prompt and adequate attention. We need assurance that environmental problems such as failure of sedimentation control, rupture of utilities (especially sanitary sewer), spillages, etc., will be promptly attended to and reported. As a step towards facilitating prompt responses, we have advised BC Gas project team of the hierarchy of Surrey's Engineering Department structure and the emergency contact telephone numbers and

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**Emergency Response Plan**

For a project of this scope and magnitude, there is a need for a thorough Emergency Response Plan which will address such emergencies as accidents, injuries, fires, etc., or even at a disaster level resulting from the malfunctioning of the pipeline that may arise during construction or in future operations. Surrey's Fire and Police Departments should be consulted in the development of such a response plan.

During construction, Surrey's Fire and Police Departments should be kept up-to-date on a daily basis on any closure of street or anticipated obstruction or delay to traffic so that alternative routes can be planned for dispatch of emergency attendance vehicles to maintain an acceptable response time to the public.

**Responsibility Towards Mitigation of Impacts Identified**

Surrey fully understands the significance and urgency of this pipeline project in meeting the immediate and future gas demand. In the light of the resultant benefit to the consumers as well as to the economy and growth at regional and Provincial levels, there is no question that this pipeline project is needed within the timing established by BC Gas. However, its routing through Surrey should not impose any burden on the Municipality. It would only be fair for all the costs to mitigate the resultant impacts to be borne by the benefitting parties, i.e., the consumers. Surrey, therefore, considers that the pipeline project should bear the full costs of the construction of the currently identified provisions to accommodate all the existing and future Municipal infrastructures as detailed above under the respective sections on "Technical Review" and "Land Use Planning".

We will be pleased to provide additional information including presentation to the Commission to further elaborate this submission. The contact person within the District of Surrey will be To-hin Lau, P.Eng., Assistant Municipal Engineer/Design. His telephone number is (604) 591-4382 and fax number (604) 591-8693.

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