MANITOBA **Order No. 93/00**

THE PUBLIC UTILITIES BOARD ACT **July 4, 2000**

BEFORE: G.D. Forrest, Chairman, Member
D.L. Barrett-Hrominchuk, Member
J.A. MacDonald, Member

AN APPLICATION BY SWAN VALLEY GAS CORPORATION FOR AN ORDER OF THE BOARD APPROVING FRANCHISE AGREEMENTS, FIXING RATES, APPROVING THE FINANCIAL FEASIBILITY TEST AND OTHER MATTERS RELATED TO THE SALE AND DISTRIBUTION OF NATURAL GAS IN THE SWAN VALLEY AREA

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Executive Summary

Background

The Swan River Valley has been attempting to obtain natural gas service for over thirty years. The financial viability of extending natural gas service to Swan River Valley has been investigated for more than a decade by various companies, including SaskEnergy Inc. ("SaskEnergy"), resident committees, and other interested parties. A decision was made that the most appropriate manner to provide natural gas service to the Swan Valley area would be through a wholly owned Local Distribution Company, a subsidiary of SaskEnergy - the Swan Valley Gas Corporation ("Swan Valley Gas"). SaskEnergy is a Saskatchewan Crown Corporation.

Under the scope of the project, Swan Valley Gas would provide gas service commencing at a metering station just inside the Manitoba border and would serve the three communities of Benito, Swan River, and Minitonas, in addition to the industrial customer Louisiana Pacific Canada Ltd. To transport the natural gas from the TransGas system at Norquay, Saskatchewan to the Swan Valley Gas system in Manitoba, a 37 kilometre transmission pipeline is being constructed. As a wholly owned subsidiary of SaskEnergy that provides inter-provincial transportation, Many Islands Pipeline will be regulated by the federal National Energy Board.

Customer Numbers

Potential customers were contacted by Swan Valley Gas by two separate letters, and town hall meetings were held in each of the three communities in January, 2000. An explanation was provided on the project scope, the fuel cost comparisons between natural gas, electricity, and propane, possible natural gas uses, and a range of conversion costs depending on the current source of fuel, and the rates to be charged for natural gas. The tables did not contain any payback periods although customers were encouraged to discuss their individual conversion needs with local contractors and dealers.

Schedule of Sales Rates and Other Charges

In its application Swan Valley Gas proposed rate schedules and classifications. Since that time, the commodity cost of gas has increased dramatically from the $3.50/Gj included in the proposed rates to the $5.00-$5.50/Gj range. Witnesses for Swan Valley Gas have noted they will be communicating with their customers the increased commodity cost of gas and explaining how that will affect the competitiveness of natural gas compared to other fuel sources. Signed up customers will also be given the opportunity to reconsider and reaffirm their commitments to Swan Valley Gas.

At the time of the hearing, Swan Valley Gas withdrew its application for the commodity charge, noting that it will wait until the market stabilizes to a more favourable price and then request approval of the commodity charge at that point. Also at the time of the hearing, the contract with Louisiana Pacific was not filed, which included its rates. Therefore, five year approval is only being sought for the Basic Monthly Charge for all customer classes and for the delivery charge for all customer classes except Industrial. Approval will also be sought in the future for the next five years for the commodity charge, although there will be a purchased gas variance account in place to track the difference between the actual cost of gas and the cost of gas embedded in the commodity charge.

Customer Connection Fee

Swan Valley Gas has sought approval to collect the following customer connection fees from all customers who request natural gas service:

Residential (including $300 rebate + GST)	$877.40
Commercial	$950.00
General Service	$7,000.00
Institutional	$15,250.00
Industrial	$300,000.00

All residential customers will be charged a connection fee of $877.40 per service. Included in that fee is a $300 rebate incentive which can be collected by any residential customer who converts or installs natural gas space heat or a water heater within twelve months of the service line being installed to their premises. No other customers were provided such a rebate.

The Louisiana Pacific connection fee was negotiated to $300,000, which would equal the cost of estimated facilities downstream of the Minitonas Town Border Station to the Louisiana Pacific plant. This connection fee does not contain any of the upstream transmission costs.

Funding

The Gas Committee and Swan Valley Gas were successful in obtaining funding commitments from all three levels of government through several different funding sources:

	$	%
Western Diversification (federal)	$1,064,433	10.3
Prairie Farm Rehabilitation Act (federal)	$750,000	7.2
Infrastructure Secretariat (provincial)	$1,064,333	10.3
Rural Economic Development Initiative (provincial)	$750,000	7.2
Municipal Governments	$1,814,333	17.5
Customer Contributions	$1,427,000	13.8
Swan Valley Gas Corporation	$3,488,000	33.7
Total	**$10,358,000**	**100%**

The five local governments participating in the funding of the Swan Valley Gas project have each passed by-laws allowing for their share of the funding to be made through the issuance of debentures. The level of funding from each is:

	$	%
R.M. of Swan River	$558,909	30.8
R.M. of Minitonas	$358,394	19.8
Town of Swan River	$755,416	41.6
Village of Benito	$68,765	3.8
Town of Minitonas	$72,648	4.0
Total	**$1,814,333**	**100%**

The Rural Municipality of Minitonas will have several customers in addition to Louisiana Pacific. The Rural Municipality of Swan River will have customers that are adjacent to the urban areas receiving gas under this project. All residents within the towns of Swan River and Minitonas and the Village of Benito will be offered natural gas service.

Some local authorities will be increasing the mill rate to raise funds for the project. However, Swan Valley Gas witnesses were unaware of the intentions of all local authorities to procure their share of the funding.

At the time of the hearing, the provincial and federal funding agreements had not been finalized.

Board Findings

Over the past 30 years, various parties have investigated the economic viability of bringing natural gas service to the Swan Valley area. These investigations have intensified over the past 10 years. The Swan Valley Gas Committee recently has been actively promoting natural gas service, several levels of governments have committed funding, and customers have expressed interest in natural gas service. Many customers have signed up for the service and paid the necessary customer connection fees. However, as discussed during the hearing, several fundamental and essential components of the project have not yet been finalized. These outstanding items include the National Energy Board decision on the Many Islands Pipeline application, the finalization of the provincial and federal funding arrangements, the finalization of the Louisiana Pacific contract, and the finalization of the Terms and Conditions of Service. Each of these items could have a significant effect on the application as filed, and must be reviewed by the Board before final approval of the application can be granted. This Order is granted for two years and will expire if all conditions are not fulfilled satisfactorily to the Board.

Subsequent to the application with the Board, the cost of natural gas has increased substantially as a result of market based price changes beyond the control of Swan Valley Gas. From the original $2.90/Gj as communicated to customers in January, 2000, to the $3.50/Gj included in the application, feasibility study, and rates, through to the $5.00-5.50/Gj forecast at the time of the hearing, the increased cost of gas is of great concern to the Board. As the cost of gas increases, the economic benefits of natural gas are reduced, thereby jeopardizing the financial viability of the project. Swan Valley Gas has undertaken to communicate these changed circumstances to potential customers, obtain confirmation of their continued commitment to connect natural gas service, and advise the Board of the outcome of that process.

Because of these outstanding issues and other reasons discussed below, the Board cannot complete its review and due diligence process, but will approve certain aspects of the application, subject to a number of conditions. Only upon satisfaction of all conditions and review by the Board to ensure compliance will the Board consider final approval along with granting of the authority to construct the natural gas pipeline.

<u>Customer Numbers and Volumes</u>

The customer attachments and volumes are integral to the economic viability of this project. Without adequate customer numbers and volumes, the viability of the project is compromised. The Board is concerned that because of the reduced economic benefit, the residents of Swan Valley may choose not to convert to natural gas. With fewer customers, the high fixed costs will be spread over a smaller customer base, resulting in higher rates. As discussed during the hearing, there is a limit as to how much rates can be increased before the economic benefit, relative to alternative fuel sources, particularly electricity, is lost.

Furthermore, others have financial interest in this project. Many Islands Pipeline will be making a considerable investment to bring gas to Manitoba from Saskatchewan. The three levels of government will invest in excess of $5.4 million in the project, and Swan Valley's contribution will exceed $3.4 million. The major industrial customer has signed a contract which only has a term of 5 years. Any decrease in annual volume consumptions from that assumed in the feasibility test will decrease revenues, and could render the project uneconomic.

The Board is of the view that it is in the public interest to mitigate, to the greatest practical extent, the possibility of the project proceeding without sufficient revenue generation potential in the early years. The Board will therefore require that a minimum annual volume commitment equal to the projected year two annual volumes as per the feasibility test including volumes of the industrial customer, be in place prior to construction commencing. For this purpose, the Board will accept a commitment as being valid if an individual or a corporation provides the required connection fee.

The calculation provided by Swan Valley Gas during the hearing indicates that the range of payback periods for consumers converting to a natural gas water heater and furnace from existing electric baseboards is 17 to 21 years at a gas cost of $4.50 per Gj. This increases to a range of 39 to 48 years at a gas cost of $5.50 per Gj. The Payback range for a modified conversion, which is from electric baseboard to natural gas water heater and fireplace, is 60 years at a commodity cost of $4.50 per Gj. The Board is concerned that the customer projections which the Board considers to have been reasonable when commodity gas costs were estimated to be $3.50 per Gj may not now be realistic. The Board is aware that Swan Valley Gas has contacted all consumers which had signed up for gas service to inquire if these consumers would still hook up to natural gas at the significantly higher prices. Subsequent to the hearing, Swan Valley Gas indicated to the Board in correspondence that it had achieved reaffirmation of customers that was less than that originally filed. For the Board, this only confirms the importance of securing year two annual volumes as a commitment prior to construction.

The Board considers that even if customers do reconfirm their intentions to avail themselves of gas service, they may offer the deposit in support of bringing natural gas to the area, but never actually intend to convert to natural gas. Although this has occurred in other areas of Manitoba, the Board recognizes that the proposed method of collecting deposits and then offering a $300 rebate if a customer connects to the system within 12 months after being able to do so mitigates against this occurrence.

The Board encourages Swan Valley Gas in its continued communications with customers to ensure informed decisions are made. Based upon the accurate market information about gas costs, if the requisite number of customers and volumes are willing to sign up and convert to natural gas, then the project will be feasible. It is up to the residents and business of Swan Valley Gas to determine that feasibility.

Conclusion

Therefore, the Board can only approve this application subject to a number of conditions being satisfied including appropriate customer attachments, National Energy Board decision, provincial and federal funding agreements, review of the Louisiana Pacific contract, review of Terms and Conditions of Service, submitting final construction plans, submitting a revised rate schedule, amongst other things.

1.0 Appearances

K.L. Kalinowsky	Counsel for The Public Utilities Board of Manitoba (the "Board")
M. Wappel G. Wood	Counsel for Swan Valley Gas Corporation
K. Saxberg	Counsel for Consumers Association of Canada (Manitoba and the Manitoba Society of Seniors Inc.) ("CAC/MSOS")

2.0 Witnesses for Swan Valley Gas Corporation

J. Adams	Manager, Pipeline Engineering, SaskEnergy Incorporated
F. Hill	Manager, Transmission and Storage Business Development, SaskEnergy Incorporated
R. Kane	Executive Director, Customer Services, Distribution Utility, SaskEnergy Incorporated
K. Pasiechnyk	Manager, Distribution Engineering, SaskEnergy Incorporated
D. Reeve	Vice-President, Business Development & Market Services, SaskEnergy Incorporated

3.0 Intervenors of Record

Consumers Association of Canada (Manitoba)and the Manitoba Society of Seniors Inc.

4.0 Presenters

B. Beales, Mayor of Minitonas

J. Bueller, Reeve of R.M. of Swan River

W. Hart, Reeve of Minitonas

B. Holmes, Councillor from Minitonas

G. MacKenzie, Mayor of Swan River

G. McCrea, Ag Shield

K. Neeley, Swan Valley Gas Committee

W. Schneider, Mayor of Benito

G. Shaver, Citizen

D. Soprovich, Citizen

R. Walker, Citizen

J. Webb, Louisiana Pacific Canada Ltd.

5.0 Background

The Swan River Valley has been attempting to obtain natural gas service for over thirty years. The financial viability of extending natural gas service to Swan River Valley has been investigated by various companies, including SaskEnergy Inc. (“SaskEnergy”), resident committees and other interested parties. In evaluating the business case for this project, SaskEnergy had analyzed several alternatives including the provision of a transportation service to a local distribution company ("LDC“) or a natural gas co-operative at the Saskatchewan Manitoba border, a joint venture involving the Swan Valley communities, and the formation of a wholly owned LDC subsidiary of SaskEnergy.

A decision was made that the most appropriate manner to provide natural gas service to the Swan Valley area would be through a wholly owned LDC subsidiary of SaskEnergy, the Swan Valley Gas Corporation (“Swan Valley Gas”). SaskEnergy is a Saskatchewan Crown Corporation.

Under the scope of the proposed project, Swan Valley Gas would provide gas service commencing at a metering station just inside the Manitoba border and would serve the three communities of Benito, Swan River, and Minitonas, in addition to the industrial customer Louisiana Pacific Canada Ltd.

On March 21, 2000 Swan Valley Gas applied to the Board for an order approving various matters pursuant to the *Public Utilities Board Act* and the *Gas Pipe Line Act*. A public hearing was held in Swan River on May 30 – June 1, 2000. This application details the approach, feasibility, and design of the proposed natural gas LDC in the Swan Valley area.

6.0 Application

In its application and during the hearing Swan Valley Gas requested an Order of the Board approving the following:

1. franchise agreements between Swan Valley Gas and the Rural Municipalities of Swan River, Minitonas, the Towns of Swan River and Minitonas, and the Village of Benito;
2. a test of the financial feasibility of Swan Valley Gas LDC;
3. a rate base;
4. a revenue requirement;
5. a cost of capital including a debt: equity ratio, a rate of return on equity, and an overall rate of return;
6. rates, tolls, and charges for service;
7. proposed customer classes;
8. connection fees for initiating service;
9. a schedule of depreciation rates;
10. affiliate transaction contracts with SaskEnergy, TransGas, and Many Islands Pipelines;
11. terms and conditions of service;
12. least cost regulation;
13. deferral accounts for purchased gas income tax and regulatory costs;
14. Authority to Construct the gas transmission and distribution system under the *Gas Pipe Line Act*; and
15. Authority to Operate under the *Gas Pipe Line Act*.

7.0 Customer Potential

7.1 Customer Numbers

Swan Valley Gas determined total existing potential residential and commercial customers and their estimated volumes by interviewing all large volume customers, most business customers, and some residential customers. Load information from propane usage and demand was obtained from the major industrial customer, Louisiana Pacific.

Potential customers were contacted by letter on two separate occasions, and town hall meetings were held in each of the three communities in January, 2000. At those meetings information was provided on the project scope, the fuel cost comparisons between natural gas, electricity, and propane, possible natural gas uses, and a range of conversion costs from various sources of fuel, and the estimated rates to be charged for natural gas. The tables did not contain any payback periods although customers were encouraged to discuss their individual conversion costs with local contractors and dealers.

Based on the initial survey and study, the total ultimate customer potential is as follows:

TOTAL ULTIMATE CUSTOMER POTENTIAL

Community	Rural	Residential	Commercial	Industrial	TOTAL
Benito	27	230	32	0	289
Swan River	50	1,420	204	0	1,674
Minitonas	0	275	25	0	300
Louisiana Pacific	0	0	0	1	1
TOTAL	**77**	**1,925**	**261**	**1**	**2,264**

For purposes of the feasibility test, Swan Valley Gas assumed 73% of residential, 60% commercial, 69% general service and 100% of industrial potential customers would convert to natural gas by the end of year ten. Attachment rates of 24% for residential, 47% for small commercial, 49% for general service, and 100% for institutional and large industrial were assumed by the end of the first year of the project (2001). By the end of year two of the project, customer attachments were projected to increase a further 15%, 8%, and 10% respectively, for the projected percentage of total potential customers. Swan Valley Gas considered these estimates reasonable based on the initial target sign up, including deposits, being reached within three weeks, and actual residential and commercial attachments recently achieved by other gas utilities in Manitoba. However, at the time of the hearing, Swan Valley Gas had not achieved its initial customer attachment targets.

In response to a question from the Board, Swan Valley Gas provided the residential conversion costs payback comparisons for differing commodity pricing at the current \$3.50, then increasing to \$4.50, \$5.00, and \$5.50. The information provided by Swan Valley Gas is as follows:

RESIDENTIAL
CONVERSION PAYBACK COMPARISONS TO COMMODITY PRICING

Conversion Description (From – To)		Conversion Costs		$3.50 Gas Cost		
		Min. $	Max. $	Annual Savings $	Estimated Recovery	
					Min. Years	Max. Years
1	Electric Forced Air to Natural Gas	2000	3000	420	6	8
2	Electric Baseboard to Natural Gas	4000	5000	420	11	13
3	Electric Baseboard to Natural Gas fireplace	3000		159	22	
4	Propane to Natural Gas	1000		1293	1	
5	Fuel to Natural Gas	2000	3000	600	4	6

Conversion Description (From – To)		Conversion Costs		$4.50 Gas Cost		
		Min. $	Max. $	Annual Savings $	Estimated Recovery	
					Min. Years	Max. Years
1	Electric Forced Air to Natural Gas	2000	3000	267	9	13
2	Electric Baseboard to Natural Gas	4000	5000	267	17	21
3	Electric Baseboard to Natural Gas fireplace	3000		59	60	
4	Propane to Natural Gas	1000		1141	1	
5	Fuel to Natural Gas	2000	3000	447	6	8

Conversion Description (From – To)		Conversion Costs		$5.00 Gas Cost		
		Min. $	Max. $	Annual Savings $	Estimated Recovery	
					Min. Years	Max. Years
1	Electric Forced Air to Natural Gas	2000	3000	191	13	18
2	Electric Baseboard to Natural Gas	4000	5000	191	24	29
3	Electric Baseboard to Natural Gas fireplace	3000		9	n/a	
4	Propane to Natural Gas	1000		1065	1	
5	Fuel to Natural Gas	2000	3000	370	7	10

Conversion Description (From – To)		Conversion Costs		$5.50 Gas Cost		
		Min. $	Max. $	Annual Savings $	Estimated Recovery	
					Min. Years	Max. Years
1	Electric Forced Air to Natural Gas	2000	3000	115	22	31
2	Electric Baseboard to Natural Gas	4000	5000	115	39	48
3	Electric Baseboard to Natural Gas fireplace	3000		0	n/a	
4	Propane to Natural Gas	1000		989	2	
5	Fuel to Natural Gas	2000	3000	294	9	12

This information shows that the payback periods for conversion to natural gas are greatly increased by the rising cost of gas, thereby reducing the economic benefits of natural gas which may have a negative effect on customer sign-ups.

7.2 Customer Volumes

Each residential customer's annual usage is estimated on average to be 111 Gj. This usage assumes conversion of space and water heating equipment for each home, but does not include any other appliances or applications. The assumption is based on normalized weather and assumes a full mix of space heating conversion and a fireplace installation for supplemental heat. The standard conversion consisting of a hot water tank and furnace would entail annual volumes of 142 Gj and the modified conversion of a hot water tank and supplemental heat fireplace would be 80 Gj for an annual average of 111 Gj based on an equal split.

Volumes were estimated for Louisiana Pacific through discussions with the company considering their equipment, processes and fuel needs. Currently Louisiana Pacific is using propane for part of its process.

A summary of the customers and volumes is contained in the following table.

CUSTOMERS AND VOLUMES

	Potential Customers	Year 1 Customers	Year 7 Customers	Potential Volumes Gj/year	Year 1 Volumes	Year 7 Volumes
Residential	1,962	468	1416	217,782	51,948	157,137
Commercial	305	142	182	94,245	43,878	56,130
General Service	39	19	27	47,931	23,351	32,937
Institutional	2	2	2	20,000	11,000	19,000
Industrial	1	1	1	320,000	320,000	320,000
TOTAL	2,309	632	1628	699,958	450,177	585,204

7.3 Rural Expansion

The Swan Valley Gas application initially will restrict the project to three communities and Louisiana Pacific. The proposed system and current funding does not contemplate service to any rural areas with the exception of those customers who have property adjacent to the initial communities distribution systems. In the future, areas of significantly different population densities will be treated independently of other areas to ensure project costs are properly borne by project participants. Swan Valley Gas filed an Investment Policy for Rural Service Areas in the Terms and Conditions of Service which summarizes the proposed approach to assessing the inability of future proposed service extensions, including the extent of any investment by Swan Valley Gas and the determined required customer contributions.

8.0 Financial Feasibility

The feasibility test filed by Swan Valley Gas was prepared using the same principles used by Centra Gas Manitoba Inc. and approved by the Board in Orders 109/94 and 89/97. The feasibility test uses a thirty year net present value approach plus a requirement that the project achieve a revenue to cost ratio of at least 1.0 by the fifth year of the project. The feasibility test is attached as Appendix I.

Swan Valley Gas determined the customer contribution requirements for each customer class by calculating the investment level that the proposed rates would sustain, providing a net present value of $0 at year thirty. The remaining capital requirement to provide service, minus third party funding, was determined to be the required Swan Valley Gas capital investment.

The rate calculation for the initial five year period was determined using traditional cost allocation methods of peak capacity for demand related costs and the number of customers for service and meter related cost. The resulting revenue requirement was then converted to rates. The rates were set constant for five years so the first year customers do not bear an unreasonable proportion of start-up and other costs. The result is that year by year the revenue to cost ratios fluctuate, but are 1:1 by year five.

The rating methodology allows for annual variations after year five to adjust for expenses and numbers of customers. A revenue to cost ratio of one will be maintained throughout the thirty years by adjusting rates as required.

For the purposes of the project feasibility study and capital project planning, the three communities have been considered as one combined customer base with no separation of capital, expenses, or rates, other than by customer class.

9.0 System Design

9.1 Many Islands Pipeline

To provide natural gas to this project, Many Islands Pipeline (Canada) Limited ("Many Islands Pipeline"), a wholly owned subsidiary of SaskEnergy, has submitted an application to the National Energy Board ("NEB") for approval to construct approximately 37 kilometre of transmission pipeline commencing at Norquay, Saskatchewan and proceeding east to a Town Border Station approximately 1 kilometre. east of the Manitoba border. Many Islands Pipeline is federally regulated by the NEB as an interprovincial pipeline company.

The application to the NEB is currently under consideration and a decision is pending. During the hearing witnesses noted that if the NEB did not approve the proposed application of Many Islands Pipeline, then the application to the Board would require amendment. The Board would be informed of any effect this would have on the rate base and revenue requirement of the project, amongst other things. Witnesses for Swan Valley Gas testified that unless there was a material change in location for the point of demarcation, the amount of funding to the project by Swan Valley Gas would not be significantly different.

The current overall capital cost of the Many Islands Pipeline is $3,307,000. These costs are not included in the feasibility test and do not form part of this application. None of the funding monies are to be used for the Many Islands Pipeline.

9.2 System Design and Routing

The system has been designed to provide natural gas to the three communities as well as to customers adjacent to the distribution facilities and to the Louisiana Pacific plant, during peak conditions. The system under the Board's jurisdiction will commence immediately downstream of the Many Islands Pipeline metering station inside Manitoba, and will consist of a 168.3 mm steel pipeline from the metering station to Swan River, a 101.6 mm steel pipeline from Swan River to Minitonas and a 114.3 mm polyethylene pipeline from Minitonas to the Louisiana Pacific Plant. The system design load, based on the projected customer peak volume requirements and various coincidence use factors, is 4,303 gigajoules ("Gj") per day.

Swan Valley Gas considered approximately 20 different design alternatives using various combinations of compression, pipe sizes and pipe types in the analyses. The design alternative ultimately chosen will accommodate a peak load of approximately 4,369 Gj per day, most of which will be available at the Swan River Town Border Station, based on current load projections. The preferred alternative was selected because it provided spare capacity beyond year 10 projected volumes, while the next least expensive alternative (at $330,000 less in capital costs) provides no such spare capacity. Swan Valley Gas stated that some excess capacity is necessary as the cost of providing a similar capacity in the future would be much costlier, third party funding may not be available in the future, rural loads were not considered for this project, and the industrial customers do utilize spare capacity from time to time, thereby contributing additional revenue.

The transmission line routing was finalized after an initial determination of corridor suitability. The route was evaluated based on natural gas reserve access, economics, operational flexibility, impact on future customer tie-ins, suitability for initial tie-ins, and proximity of areas of environmental interest. Once the corridor had been selected, routes were proposed and evaluated based on local terrain, wildlife habitat, heritage resource potential, population placements and land use. Aerial photographs and topographical maps were used to determine conceptual routing while helicopter surveys were used to fine tune the pipeline routing in selected area of the alignment, primarily water course crossings. The pipeline will be constructed in existing rights-of-ways where practical, and Swan Valley Gas will obtain easements for other required locations. Swan Valley Gas has completed an environmental assessment plan and has filed it for approval with all applicable federal and provincial regulatory bodies.

Pipelines will be designed, constructed and operated in accordance with the CAN/CSA-Z662-M99 standard. Maximum operating pressure will be 8274 kPa.

The distribution systems would consist of three Town Border Stations, at Benito, Swan River and Minitonas and polyethylene distribution mains would be installed along with appropriate services and meter sets to serve individual customers needs.

Construction approvals have been applied for, and construction will not commence until all the requisite approvals, including those of the Board, have been received.

9.3 Capital Costs

Swan Valley Gas estimated the project costs in terms of year 2000 dollars based on the selected route, using the following parameters:

- GST at 7% excluded
- PST at 7% and general freight included
- 7% contingency for transmission pipelines
- 8% contingency for labour and materials on the distribution systems
- 7% interest during construction to project completion
- 13% Overheads for the transmission mains:
    - 4% for engineering, environmental and drafting
    - 9% construction inspection and radiography
- 10% overheads for administration and engineering for the distribution system
- 8% land acquisition and survey.

Swan Valley Gas based its estimates on historical data for labour, material and equipment costs, adjusted to suit anticipated local conditions. A summary of the ultimate estimated capital costs of $10,357,000 (exclusive of Many Islands Pipeline costs) is shown in Appendix “II” attached to this Order.

Many Islands Pipeline will be funding the federally regulated pipeline and the resulting capacity will be fully subscribed by Swan Valley Gas with no other customers. Its capital costs are not included in the Swan Valley Gas project.

9.4 Depreciation

Swan Valley Gas requested approval of depreciation rates for its physical assets. The rates are consistent with SaskEnergy's and are broken down as follows:

DEPRECIATION RATES

High Pressure Steel Pipelines	2.50%	40 years
Town Border Stations	3.03%	33 years
Mains	2.50%	40 years
Services and Meters	3.45%	29 years
General/Other	5.00%	20 years
Weighted Average (Year 1)	2.60%	
(Year 10)	2.67%	

The useful service lives of each asset category generally falls within the range of standard industry experience as examined in a study undertaken by SaskEnergy of other Canadian local distribution companies.

10.0 Gas Supply

All gas is to be purchased from SaskEnergy at the TransGas Energy Pool ("TGEP"). Gas prices will consist of the actual commodity price and upstream transportation and storage costs. Gas pricing at the TGEP is determined by the marketplace with producers, marketers, and consumers openly purchasing and selling. Currently, the TGEP is trading at a discount to the Alberta AECO-C hub. The cost of gas Swan Valley Gas will obtain from SaskEnergy will include the unit cost of gas purchased from SaskEnergy, plus the storage and transportation costs necessary to provide the gas to Swan Valley Gas at the Many Islands Pipeline Metering Station in Manitoba at Swan Valley's estimated load factor. The current commodity cost of gas included in the application at the TGEP is $3.50/Gj.

The commodity cost of gas is defined as the delivered cost of gas at the Many Islands Pipeline Metering Station in Manitoba. The commodity cost is a weighted average cost of gas (WACOG) and is calculated based on throughput and demand levels for each customer class.

Additionally, there will be a $.03/Gj agency fee to SaskEnergy for arranging the purchasing and managing supply on a daily basis. Swan Valley Gas will sign a gas supply and management contract with SaskEnergy for provision of gas supply, storage, nomination, and balancing services.

Swan Valley Gas will also sign contracts with TransGas for upstream transportation and commodity from the TransGas Energy Pool to Norquay, Saskatchewan and with Many Islands Pipeline for upstream transportation from Norquay to the town border station just inside the Manitoba border. The TransGas charges will be set at the posted tolling rates charged to all customers who have gas transported within Saskatchewan. The Many Islands Pipeline charges are set through the National Energy Board regulatory approval process. The three contracts between Swan Valley Gas and SaskEnergy and TransGas and Many Islands Pipeline require Board approval under s.82 of the *Public Utilities Board Act*.

The allocation of transportation utilization by class is undertaken on a percentage of peak day demand capacity for each customer class. The result is a different WACOG for each customer class, which is directly related to the class's load factor. The following is the WACOG calculation at the Manitoba border, broken down by customer class:

WACOG CALCULATION

Commodity Price		
Annual Gas Commodity Purchases (Gj)	450,177	
Projected Average Purchase Price	3.50	
Agency Fees ($/Gj)	.03	
Total Commodity Price	$1,587,000	$1,587,000
Trans Gas Tolling		
Basic Monthly Cost ($)	3,000	
Tariff Toll ($)	111,000	
Total TransGas Tolls	$114,000	$114,000
Many Islands Tolling		
Tariff Toll ($)	$488,000	$488,000
Total Commodity Price		$2,189,000
WACOG at Manitoba Border ($/Gj)	$4.86	
Residential COG ($/Gj)	$5.64	
Commercial	$5.64	
General Service	$5.34	
Institutional	$5.11	
Industrial	$4.58	

The WACOG calculation at the Manitoba border is the commodity charge requested in the rate schedule.

11.0 Schedule of Sales Rates and Other Charges

In its application Swan Valley Gas set out proposed rate schedules and classifications. Since that time, the commodity cost of gas has increased dramatically from $3.50/Gj to the $5.00/Gj range. Witnesses for Swan Valley Gas have noted they will be communicating with their customers the increased commodity cost of gas and explaining how that will affect the competitiveness of natural gas compared to other fuel sources. Signed up customers will also be given the opportunity to reconsider and reaffirm their commitments to Swan Valley Gas. If the customer numbers are re-confirmed at the same or near that level, then the intention is to proceed with construction this summer for fall service of natural gas.

RATE SCHEDULE

	Basic Monthly Charge ($/month)	Delivery Charge ($/Gj)	Commodity Charge in Application ($/Gj)	Commodity Charge ($Gj)
Residential	26.69	.82	5.64	TBA
Commercial	26.69	.82	5.64	TBA
General Service	26.69	.82	5.34	TBA
Institutional	26.69	.61	5.11	TBA
Industrial	250.00	Demand Charge Individually Contracted	Independently Contracted	Independently Contracted

At the time of the hearing, Swan Valley Gas withdrew its application for the commodity charge, noting that it will wait until the market stabilizes to a more favourable price and then request approval of the commodity charge at that point. Also at the time of the hearing, the contract with Louisiana Pacific was not filed as it was not executed and the delivery charge with the industrial is included in that contract. Subsequent to the hearing, the contract was filed with the Board. Therefore, approval is only being sought for the Basic Monthly Charge for all customer classes and for the delivery charge for all customer classes except Industrial. Approval is being sought for the next five years for the delivery charge and the basic monthly charge.

Approval will also be sought for the next five years for the commodity charge, although there will be a purchased gas variance account in place to track the difference between the actual cost of gas and the cost of gas embedded in the commodity charge. From time to time, as commodity and storage costs change, Swan Valley Gas will make an application to the Board, under least cost regulation to change the commodity charge. Commodity charges are applied to all volumes of gas passing through a customer's meter.

Delivery charges are also applied to all volumes of gas moved through the customer's meter, except for contract Industrial. Contract Industrial delivery charges are demand based, meaning the full monthly demand is charged each month, regardless of consumption.

The Basic Monthly Charge is for services, meters, and general capital depreciation expenses. The charge is the same for all customer classes except for industrial since the service and meter category is treated as one capital base.

Witnesses for Swan Valley Gas stated they were unable to break down the components of cost on a customer's gas bill similarly to the requirements in Board Order 19/00. It is the intention to use the customer billing system of SaskEnergy and the cost burden of changing this for a small customer base was high.

At this time, all customers will be supplied from Swan Valley Gas, with the exception of Louisiana Pacific who will independently contract for their own gas supply.

11.1 Customer Connection Fee

Swan Valley Gas has sought approval to collect customer connection fees from all customers who request natural gas service.

To calculate the connection fee, Swan Valley Gas determined the total capital requirements minus the third party contributions from government sources to yield a net capital requirement. For each customer class, the estimated number of customers was multiplied by the average investment per customer that Swan Valley Gas was prepared to make for that service, which was then subtracted from net capital requirement, yielding a gross contribution requirement. The industrial customer's $300,000 contribution was subtracted, leaving a net contribution requirement which was broken down by the remaining customer classes on the basis of system capacity. The recommended contribution levels are:

Residential (including $300 rebate + GST)	$877.40
Commercial	$950.00
General Service	$7,000.00
Institutional	$15,250.00
Industrial	$300,000.00

All residential customers will be charged a connection fee of $877.40 per service. Included in that fee is a $300 rebate incentive which can be collected by any residential customer who converts or installs natural gas space heat or a water heater within twelve months of the service line being installed to their premises. No other customers were provided such a rebate.

The Louisiana Pacific connection fee was negotiated to $300,000, which would equal the estimated facilities downstream of the Minitonas Town Border Station to the Louisiana Pacific plant. This connection fee does not contain any of the upstream transmission costs. During the hearing, Swan Valley Gas recalculated the Louisiana

Pacific contribution on the same basis as other customer contributions were determined. This calculation shows a required contribution of $317,000.

12.0 System Operation

The system will be operated by one full-time qualified technical employee who will maintain an office and appropriate equipment in Swan River. All other services will be purchased from SaskEnergy.

12.1 Authority to Operate

Swan Valley Gas filed partial technical standards and procedures in response to a Board Information Request which Swan Valley Gas proposed to use as its operational guidelines, pursuant to the *Gas Pipe Line Act*.

12.2 Management Services Agreement

Swan Valley Gas intends to procure many of its construction, management, and operational services from its parent, SaskEnergy. The unexecuted Management Services Agreement governing the sharing of services between Swan Valley Gas and SaskEnergy was filed with the Board for approval. A schedule of fixed and variable fees for each of the cost centre services is attached to the Management Services Agreement. The initial annual estimated fee is currently estimated to be slightly in excess of $80,000.

In addition to, and separate from the affiliated operational services, the internal Swan Valley Gas operating and maintenance expenses are estimated to be $161 per customer with a minimum annual operating cost of $161,000 included in the feasibility test. The minimum annual cost is based upon the estimated direct cost of maintaining one full-time service position in Swan Valley, plus the cost of the required building and necessary equipment. There will be a joint sharing of emergency response and after hour calls between Swan Valley Gas and SaskEnergy in the neighbouring vicinity, which is based on cost.

13.0 Funding

The Gas Committee and Swan Valley Gas were successful in obtaining funding commitments from all three levels of government through several different funding sources. Project funding to support the capital cost requirements will come from the following sources:

	$	**%**
Western Diversification (federal)	$1,064,433	10.3
Prairie Farm Rehabilitation Act (federal)	$750,000	7.2
Infrastructure Secretariat (provincial)	$1,064,333	10.3
Rural Economic Development Initiative (provincial)	$750,000	7.2
Municipal Governments	$1,814,333	17.5
Customer Contributions	$1,427,000	13.8
Swan Valley Gas Corporation	$3,488,000	33.7
Total	**$10,358,000**	**100%**

The five local governments participating in the funding of the Swan Valley Gas project have each passed by-laws allowing for their share of the funding to be made through the issuance of debentures. The level of funding from each is:

	$	%
R.M. of Swan River	$558,909	30.8
R.M. of Minitonas	$358,394	19.8
Town of Swan River	$755,416	41.6
Village of Benito	$68,765	3.8
Town of Minitonas	$72,648	4.0
Total	**$1,814,333**	**100%**

The Rural Municipality of Minitonas will have several customers in addition to Louisiana Pacific. The Rural Municipality of Swan River will have customers that are adjacent to the urban areas receiving gas under this project.

Some local authorities will be increasing the mill rate to raise funds for the project. However, Swan Valley Gas witnesses were unaware of the intentions of all local authorities to finance their share of the funding.

At the time of the hearing, the provincial and federal funding agreements had not been finalized. A letter of commitment form the Canada/Manitoba Economic Development Partnership Agreement dated April 1, 1999 indicated an intent to provide funding for the Swan Valley Gas project. Witnesses for Swan Valley Gas acknowledged that all funding arrangements were required to be finalized and reviewed by the Board prior to final approval of the application. It is the intention of Swan Valley Gas to file with the Board the funding agreements upon execution.

14.0 Regulation

Swan Valley Gas sought approval of the “least cost” form of regulation that the Board has approved for Stittco Utilities Man. Ltd. and the Gladstone Austin Natural Gas Co-operative. The steps as outlined in Board Order 110/95 were filed at the hearing to provide the specificity of the requested form of regulation, and are attached as Appendix III to this Order. In the event the Board does not approve the least cost form of regulation, Swan Valley Gas requested a deferral account for future regulatory expenses, and unanticipated changes to taxes.

15.0 Franchise Agreements

In compliance with the *Public Utilities Board Act*, Swan Valley Gas seeks approval of five franchise agreements between itself and the Rural Municipalities of Swan River and Minitonas, the Towns of Swan River and Minitonas, and the Village of Benito. Each of the local authorities has given first reading to the Franchise Agreements. Second and third readings must ensue prior to the Franchise Agreements being executed by Swan Valley Gas and the local authorities.

Under the Franchise Agreements Swan Valley Gas will be given the exclusive right to supply, transmit, and distribute natural gas within the entire franchise area for a thirty year term. At this point in time, the area to be serviced is a corridor of the urban communities and the industrial customer, notwithstanding the franchise is to be for each of the entire rural municipality or town.

Witnesses indicated the Franchise Agreements were in the same format as those recently approved by the Board for other LDC expansions.

16.0 Cost of Capital

Swan Valley Gas has requested a return on equity of 11% based on a Long Canada bond rate of 6.25% and a risk premium of 4.75%. According to witnesses, whereas current allowed returns on equity are in the 9% range, this project has the added risk of being extremely small, relatively isolated, and a new undertaking with no established customer base. Traditional methods of establishing risk premiums would have generated a higher return on equity that could have made the project uncompetitive to other fuel sources. Therefore, Swan Valley Gas is requesting a rate of return on equity that would focus on generating a competitive energy price advantage to encourage customers to sign-up for natural gas and thus ensure the viability of the project.

The debt:equity ratio for which approval is sought is 65:35 for the thirty year term of the franchise with an overall rate of return of 8.4%.

17.0 Outstanding Items

At the hearing it became apparent that there were several items outstanding that required approval and/or execution prior to being reviewed by the Board. Notably absent were the funding agreements with federal and provincial sources. The contract with Louisiana Pacific was filed after the hearing and a process put in place to allow a review of the documents. The terms and conditions of service were filed at the hearing and the Board directed a working group to meet with Swan Valley Gas to review the terms and conditions of service and then to present them to the Board for its review and approval. The National Energy Board decision on the Many Islands Pipeline decision is also pending.

18.0 Intervenor's Position

Counsel for CAC/MSOS noted that Swan Valley Gas had failed in its main task of satisfying the onus that the project is financially feasible at a reasonable sales rate. Therefore the project fails to conserve the public interest. As a stand alone utility, the project is not feasible because the Swan Valley Gas attachment assumptions for residential customers are unreasonable and unlikely to be achieved. A rate increase to compensate for lower than expected attachments would make the sales rate unreasonably high for consumers. At the current high cost of gas, the attachment assumptions are unreasonable, especially considering the feasibility study used $3.50/Gj as the cost of gas.

Furthermore, CAC/MSOS stated that the attachment assumptions are unreasonable because the high cost of conversion combined with higher gas costs means a lengthy payback period, thus eroding the savings of natural gas as compared to other energy sources. Finally, actual sign-ups to date are less than targeted notwithstanding the intensive marketing, and lower estimated cost of gas.

With respect to volumes, counsel for CAC/MSOS noted that Swan Valley Gas's use of III Gj was contrary to previous Board Orders requiring 100 mcf (106 Gj) to be used in feasibility studies. Furthermore, half of the potential customers were projected to make a modified rather than standard full conversion, thereby bringing into question the validity of the III mcf estimate.

CAC/MSOS contended that the industrial customer connection fee of $300,000 was inadequate, resulting in an inequitable sharing of costs between customers, with residential customers overpaying their share.

The municipal funding arrangements were questioned. Concern was expressed as to a fair allocation between those who will receive the direct benefits of natural gas and those receiving indirect benefits, since all taxpayers would contribute to funding irrespective of whether they converted to natural gas. Notwithstanding, the inequities were insufficient to interfere with the elected officials' decisions.

The rate of return was said to be high because it was higher than that requested from the NEB by Many Islands Pipeline on the same venture essentially. The application for least cost regulation was opposed and full public oral hearings were urged upon the Board to ensure just and reasonable rates.

Given the mistaken assumptions in the feasibility test and the uncertainties with respect to a lack of funding agreements, no Louisiana Pacific contract, and no decision from the National Energy Board on Many Islands Pipeline, the Board was urged to wait for these uncertainties to resolve prior to making any decision on the application.

19.0 Presenters

Mr. Gord Shaver

Mr. Shaver, a retired businessman and forty-year resident of Swan Valley, supported the application. Mr. Shaver prefers natural gas over propane and hydro for its cost effectiveness and multifarious uses, noting natural gas would be a real amenity for the town. Mr. Shaver noted that natural gas can be used for cooking, water heating, drying clothes, and gas fireplaces, and moreover, 'it's clean and comfortable to live with'. The benefits of natural gas would be for the residents, businesses, and future economic development.

Mr. Kelly Neely (Chairman of the Gas Committee and a member of Swan River Town Council)

Mr. Neely, a Swan River business owner, supported the application. Mr. Neely cited the benefits for consumers in stable and economical natural gas pricing as a reason for supporting Swan Valley Gas. Even with the increase in the commodity cost of gas, with its history of stable pricing, the price fluctuation should level off in a few months and consumers will make their choice on the economics of the energy source. He added that the project would bring jobs to the region. Mr. Neely objected to the fact that a Manitoba Seniors group was granted intervenor status on the matter, considering that no local seniors were consulted.

Darlis Colin (Development Officer, Swan Valley Enterprise Centre)

Swan Valley Enterprise Centre supports the application as a means of enhancing the quality of life in the Swan Valley and promoting local business opportunities. They indicated that the advent of natural gas would positively affect the local economy by creating opportunities for business and industry development. Industry expects natural gas to be the energy source and without it, the potential for local development that would help sustain rural areas is diminished.

Mr. Bill Schneider (Mayor of Benito, Member of the Swan Valley Natural Gas Committee)

Mayor Schneider stated that he was in favour of natural gas. He maintained that the people of Benito are in favour of natural gas, and that their views were mimicked by the Village Council. Mayor Schneider added that the low costs associated with natural gas would be ‘of great assistance’ to the Benito and District Community Centre – a hockey and curling rink – which currently meets its heating needs with electricity and propane. This, in turn, would help keep user fees for the community centre at a reasonable rate.

Mr. Glen MacKenzie (Mayor of Swan River)

Mayor MacKenzie supported the application. In the past, due to the unavailability of natural gas it was difficult to attract industry to the area. Mayor MacKenzie cited instances in which an ethanol plant, a strawboard plant, and others were interested in developing in the Swan River Valley, but ultimately declined due to the absence of natural gas. It was necessary to be visionary and think of the widespread benefits. Furthermore, savings would accrue to the town and its inhabitants as public buildings converted to natural gas from other energy sources.

Mr. Jake Bueller (Reeve, Rural Municipality of Swan River)

Mr. Bueller, supported the application as a means of attracting industry to the Valley, thereby augmenting the tax base. Moreover, Mr. Bueller noted that the RM would be doing ratepayers a service by allowing them the opportunity for cheaper energy to heat their homes, cook their meals, and use gas for grain drying. The RM is attempting to attract business by providing natural gas.

Mr. Dick Walker

Mr. Walker, a resident of Swan River is an adamant supporter of the natural gas proposal. As a director and past President of Spruce Products Ltd. Mr. Walker was of the view that it could expand operations if natural gas were available in the region. Mr. Walker also expressed that natural gas would be good for the community as a whole, benefiting consumers in the form of lower energy costs.

Mr. James Webb (Louisiana Pacific)

In 1996 Louisiana Pacific began producing construction materials known as oriented strand board and employs one hundred and fifty-six people. The company has been successful, as oriented strand board has become one of the most preferred building materials in the last 20 years, overtaking plywood in the panel market.

Oriented strand board's success depends on the availability of natural gas, largely because the manufacturing process involves drying the raw materials at a temperature of 1,000-1,400 degrees Fahrenheit. Moreover, the regenerative thermal deoxidizers used to control emissions are designed to run on natural gas. This makes the availability of natural gas most desirable to the manufacturing process.

In the absence of natural gas, the plant consumes approximately 30,000 litres of propane per day. Two propane railway tankers must be restocked every few days by tankers from Regina. This, he added, is especially inconvenient given that propane liquifies at minus 40 degrees, noting that natural gas does not liquify at such a temperature. In summary Louisiana Pacific requires a constant supply of fuel and natural gas is the answer to some operational difficulties.

Mr. Dan Soprovich

Mr. Soprovich, a self-employed wildlife ecologist, opposed the application on two grounds, the first relating to fairness of the proposal to all ratepayers and the second relating to the potential impact on greenhouse emissions. Mr. Soprovich argued that the expenditure of municipal funds to obtain natural gas service was not in local residents' interests because only 26% of Swan Valley residents signed up to use natural gas, and many of those who did sign up were only doing a partial conversion to accommodate gas fireplaces. Given the conversion costs entailed with establishing a natural gas infrastructure (approximately $1,000 per Swan River resident in Mr. Soprovich's estimation), he concluded that it is not economical to covert from hydro or propane to natural gas. The only real benefactor from natural gas is Louisiana Pacific who will be using approximately 73% of the natural gas initially, and 55% seven (7) years after the pipeline is established. It is not fair, therefore, for residents to fund the project, at an estimated cost of $750,000 through local taxes. Finally, considering that natural gas prices are set to rise and that the price of electricity has stabilized – not having risen in some five years – electricity may be the least expensive energy option in the near future.

Finally, in respect of the second concern relating to greenhouse emissions, Mr. Soprovich noted that the generation of greenhouse gasses is leading to global warming and that the potential ecological impact of the proposed developments are not fully understood. He added that the initial investments towards natural gas could instead be applied towards energy conservation, by upgrading insulation and installing heat pumps.

Ms. Barb Holmes (Councillor, Town of Minitonas**)**

Ms. Barb Holmes supports the natural gas proposal. Her experience as a business owner led her to conclude that the cost of electricity and the labour intensive nature of wood burning fireplaces make natural gas the preferred energy source for heating purposes. Natural gas, she said, will provide long-term cost savings for local businesses.

Mr. Barclay Beales (Mayor of Minitonas)

Mayor Beales, an employee of Louisiana Pacific, supported the application. He contended that the natural gas project would benefit everyone in Swan Valley from business, community-owned arenas, schools, hospitals, to the farmers with grain-drying facilities. The Minitonas Council unanimously supports the project in that it would encourage business and industry in the region. In the long run, the benefits to his community would outweigh the costs related to increased local taxes.

Mr. Gary McCrea (AgShield Manufacturing)

Mr. McCrea, a Benito resident and member of the Gas Committee supports the natural gas project. Mr. McCrea owns a farm machinery manufacturing business formerly located in Roblin – where it was affixed with natural gas facilities – which was subsequently relocated to Benito where no natural gas is available. He stated that his heating expenses are considerably higher in Benito because he has no access to natural gas and is relegated to using propane. Due to the financial pressures faced by the agricultural sector, Mr. McCrea maintains it is increasingly difficult to remain profitable and the excess cost associated with propane use could force him to consider relocation to a centre with natural gas facilities.

Mr. Bill Hart (Reeve of Minitonas)

Mr. Hart, the Reeve of Minitonas and member of the Gas Committee, supported the application. The natural gas project would benefit Swan Valley residents as a whole because everybody would get benefits from industry. The absence of natural gas will curtail local investment and industry and that the youth will vacate the region in search of career and business opportunities.

20.0 Board Findings

20.1 General

Over the past 30 years, various parties have investigated the economic viability of bringing natural gas service to the Swan Valley area. These investigations have intensified over the past 10 years. The Swan Valley Gas Committee recently has been actively promoting natural gas service, several levels of governments have committed funding, and customers have expressed interest in natural gas service. Many customers have signed up for the service and paid the necessary customer connection fees. However, as discussed during the hearing, several fundamental and essential components of the project have not yet been finalized. These outstanding items include the National Energy Board decision on the Many Islands Pipeline application, the finalization of the provincial and federal funding arrangements, a review by the Board of the finalized Louisiana Pacific contract, and the finalization of the Terms and Conditions of Service. Each of these items could have a significant effect on the application as filed, and must be reviewed by the Board before granting any final approval of this application.

Subsequent to the March 21, 2000 application with the Board, the cost of natural gas has increased substantially as a result of market based price changes beyond the control of Swan Valley Gas. From the original $2.90/Gj as communicated to customers in January, 2000, to the $3.50/Gj included in the application, feasibility study, and rates, through to the $5.00-5.50/Gj forecast at the time of the hearing, the increased cost of gas is of great concern to the Board. As the cost of gas increases, the economic benefits of natural gas relative to other fuels are reduced, thereby jeopardizing the financial viability of the project. Swan Valley Gas has undertaken to communicate these changed circumstances to potential customers and obtain confirmation of their continued commitment to connect natural gas service.

Because of these outstanding issues and other reasons discussed below, the Board cannot complete its review and due diligence process, but can only approve certain aspects of the application, subject to a number of conditions as discussed later in this Order. Only upon satisfaction of all conditions and review by the Board to ensure compliance, will the Board consider final approval along with granting of the authority to construct the natural gas pipeline.

The Board will allow Swan Valley Gas a period of two years from the date of this Order to comply with all conditions set out. Failure to achieve all conditions will result in the expiry of this Order. Fulfilment of all conditions must be satisfactory to the Board and are to be confirmed in a subsequent Board Order.

20.2 Feasibility Test

The Board commends the significant efforts made by the residents of the Swan Valley over the years in an attempt to secure natural gas service for the area. Even with the desire by many residents to have natural gas service, the Board must ensure the project is economically feasible and in the public interest, and in particular, that sufficient customers with sufficient volumes will sign up to enhance the project's sustained viability.

The appropriate financial feasibility test has been utilized by Swan Valley Gas. This test includes using a thirty year net present value test and a requirement that the project achieve a revenue to cost ratio of 1.0 by year five of the project. The Board will therefore accept the feasibility study as filed. However, Swan Valley Gas should, in due course, file an updated feasibility test that reflects the updated information resulting from the customer reaffirmation process, and all other updated information as discussed further in this Order.

20.3 Customer Numbers and Volumes

The revenue assumptions are a cornerstone of the feasibility test and the viability of this application. The Board recognizes that the feasibility test in and of itself is not impacted by changes in the commodity cost of gas. The same cost of gas is used in the revenue calculation as is used in the cost calculation. However, given the significant increase in the current price of gas to $5.00 to $5.50/Gj, and the forward price curves forecasting levels to remain in the $4.50 to $5.25/ Gj range, the Board is concerned that because of the reduced economic benefit, the residents of Swan Valley may choose not to convert to natural gas.

The customer attachments and volumes are integral to the economic viability of this project. Without adequate customer numbers and volumes, the viability of the project is compromised. With fewer customers, the high fixed costs will be spread over a smaller customer base, resulting in higher rates. As discussed during the hearing, there is a limit as to how much rates can be increased before the economic benefit, relative to alternative fuel sources, particularly electricity, is lost.

Because the applicant is a new entity and stand alone LDC, the cross-subsidization of new customers by other Manitoba natural gas customers is not an issue. However, Many Islands Pipeline will make a considerable capital investment, to bring gas to Manitoba from Saskatchewan. The three levels of government will invest in excess of $5.4 million in the project, and Swan Valley's contribution will exceed $3.4 million. The major industrial customer has signed a contract which only has a term of 5 years. Any decrease in annual volume consumptions from that assumed in the feasibility test will decrease revenues, and could render the project uneconomic. The Board is of the view that it is in the public interest to mitigate, to the greatest practical extent, the possibility of the project proceeding without sufficient revenue generation potential in the early years. The Board will therefore require that a minimum annual volume commitment equal to the projected Year 2 annual volumes as per the feasibility test including volumes of the industrial customer be in place prior to construction commencing. For this purpose, the Board will accept a commitment as being valid if an individual or a corporation provides the required connection fee.

The Board is appreciative of the detailed market survey conducted by Swan Valley Gas and the Swan Valley Natural Gas Committee in assessing the potential customers and estimating the annual consumptions of the potential customers. The Board has found the assessment of the existing fuel types, which indicated that approximately 64% of the residential premises currently use electric baseboard heat, to be valuable in its deliberations.

The annual consumption estimates for the other classes of customers were based on site visits to many premises, and included assessments of similar premises. The Board is satisfied that the evidence supports the average annual residential consumption estimate of 111 Gj and is of the view that the average annual consumption estimates for all customer classes are reasonable.

20.4 Rural Expansion

Swan Valley Gas noted that only those individual residential customers residing within the three communities or immediately adjacent will receive natural gas service. Swan Valley Gas noted it would evaluate subsequent major expansions using the Investment

Policy. In the Board's view, the Investment Policy for Rural Service Areas provides for the exercise of discretion by Swan Valley Gas. Rather than permit discretionary decisions for future expansions, the Board would prefer a more objective individual feasibility test on each proposed major expansion. Because the Investment Policy is contained in the Terms and Conditions of Service, the Board will provide further direction on this matter in a subsequent order dealing with the Terms and Conditions of Service to ensure individual feasibility tests will be the measurement instrument for Rural Service Areas.

20.5 System Design

The Board did not review matters relative to the construction of the Many Islands Pipeline from Norquay, Saskatchewan to a metering station in Manitoba, as that matter is under the authority of the National Energy Board. However, the Board's comments and directives contained in this Order are predicated on the assumption that the National Energy Board will approve the Many Islands application as filed. Should the National Energy Board approve an amended application, the Board will have to consider the consequences of the amendments on this decision.

The Board is of the view that the design of the proposed transmission system in Manitoba from the metering station to the Louisiana Pacific plant has the capacity to meet the customer volumes and peak loads. The transmission system will also have sufficient capacity to accommodate an additional peak load of approximately 500 Gj per day. The Board considers the allowance for future load in rural service areas, or for other commercial or industrial increases in load or in customers to be reasonable.

The Board is also satisfied that the distribution system as proposed to bring natural gas service to the three communities and adjacent areas, and to the Louisiana Pacific plant east of Minitonas, is adequate. The Board will therefore approve the transmission and distribution systems design as submitted. The Board will require all systems to be constructed, inspected and tested in accordance with relevant CSA standards and construction supervision processes and contract administration shall always comply with commonly accepted industry standards and practices. The Board recognizes that the construction drawings are at a preliminary design stage, and the approval of the transmission system is subject to Swan Valley Gas submitting final construction drawings to the Board for approval prior to constructing the system. The Board will also require Swan Valley Gas to submit final "As Built" record drawings for the Board's future reference at completion of construction.

The Board has reviewed the technical submission by Swan Valley Gas and has identified the need for further information. The Board through its Technical Advisors, will obtain this information and further clarification of standards and procedures as may be necessary. When all other conditions and outstanding matters are satisfactorily resolved, the Board will grant Swan Valley Gas the Authority to Construct the installed system conditional upon all technical matters being resolved in a manner satisfactory to the Board. Similarly, the Board will confirm the Authority to Operate at a later date.

The Board will approve the depreciation rate schedule as filed by Swan Valley Gas, but will expect that should experience over time with this project so dictate, any changes will be filed with the Board on a timely basis.

The Board wishes to complement Swan Valley Gas on the assessment of alternate pipeline routes and the extent of their site investigations along the chosen route, including an evaluation of the proposed water course crossings. The Board considers the methodology used to estimate capital costs to be sound, and the unit costs to be reasonable. The Board will approve the projected capital cost estimates as submitted. The Board also recognizes that the final construction costs will ultimately be used to determine the actual third party contributions, and that any cost overruns will be the responsibility of Swan Valley Gas. To the extent that any excess expenditures are deemed to be prudent by the Board after investigation, these will be included in rate base and be borne by the Swan Valley Gas consumers. Should the Board find these expenditures not to have been prudent, it will fall to the shareholders of Swan Valley Gas to absorb all such costs.

20.6 Gas Supply

As noted by one of the witnesses, this application is the victim of unfortunate timing. Whereas gas prices have fluctuated within a price range over the past several years, within recent few months the cost of gas has broken through that range and increased dramatically. The extreme volatility and the sudden increase threatens the feasibility of the project. Swan Valley Gas brought this to the attention of the Board and has volunteered to seek reaffirmation from its customers of their commitment to convert to natural gas given the higher gas costs. In its communication to potential customers, Swan Valley Gas described the increased cost of gas, the higher rates to be sought, and the revised comparisons of economic benefits of gas with other energy sources. Swan Valley Gas encouraged customers to meet with local contractors to determine their conversion costs and then pay back periods.

The Board notes that the calculation provided by Swan Valley Gas during the hearing indicates that the range of payback periods for consumers converting to a natural gas water heater and furnace from existing electric baseboards is 17 to 21 years at a gas cost of $4.50 per Gj. This increases to a range of 39 to 48 years at a gas cost of $5.50

per Gj. The Payback range for a modified conversion, which is from electric baseboard to natural gas water heater and fireplace, is 60 years at a commodity cost of $4.50 per Gj. The Board is concerned that the original customer sign up projections which the Board considers to have been reasonable when commodity gas costs were estimated to be $3.50 per Gj may not now be achievable. The Board is aware that Swan Valley Gas has contacted all consumers who have signed up for gas service to inquire if these consumers would still hook up to natural gas at the significantly higher prices. Subsequent to the hearing, Swan Valley Gas indicated to the Board in correspondence that it had achieved reaffirmation of customers that was less than that originally filed. For the Board, this only confirms the importance of securing year two annual volumes as a commitment prior to construction.

The Board considers that even if customers do reconfirm their intentions to avail themselves of gas service, they may offer the deposit in support of bringing natural gas to the area, but never actually intend to convert to natural gas. Although this has occurred in other areas of Manitoba, the Board recognizes that the proposed method of collecting deposits and then offering a $300 rebate if a customer connects to the system within 12 months after being able to do so is intended to mitigate against this occurrence.

The Board encourages Swan Valley Gas in its continued communications with customers to provide sufficient current information so that informed decisions can be made. Based upon the accurate market information about gas costs, if the requisite number of customers and volumes are willing to sign up and convert to natural gas, then the project will be feasible. It is up to the residents and businesses of Swan Valley Gas to determine that feasibility.

The Board accepts as reasonable the gas supply and transportation arrangements Swan Valley Gas will enter into to purchase gas at the TransGas Energy Pool and transport it to Swan Valley. The $.03/Gj agency fee payable to SaskEnergy for arranging purchasing and managing supply will be approved by the Board as an affiliate transaction. The Board views the TransGas arrangements at this time to be an appropriate affiliate transaction but will require Swan Valley Gas to file the posted tariff for the Board's review and approval. Any future updates of the TransGas tariff must be filed with the Board for approval. Similarly, the Many Islands Pipeline arrangements are appropriate affiliate transactions, particularly since its tolls will be regulated by the National Energy Board. The Board will review the appropriateness of the affiliate transaction fees from time to time at subsequent applications.

Upon reviewing the WACOG calculation and other cost allocations, the Board considers the allocation of transportation utilization by customer class on a percentage of peak day demand capacity for each customer class as appropriate.

20.7 Schedule of Sales Rates and Other Charges

There is uncertainty of numerous fundamental components of this application. Should any of these components be altered materially, then the proposed rates will change. For instance, if the National Energy Board changes the point of demarcation for Many Islands Pipeline, then the charges for Many Islands Pipeline, included in the delivery charge, will require alteration. Similarly, the Louisiana Pacific contract includes rates which must be approved by the Board, yet this contract has only recently been filed with the Board, after the close of the hearing.

At this time the Board cannot obviously approve the transaction to purchase gas at $3.50/Gj since that price is fluctuating and is greatly undervalued from current market conditions. The Board will review that charge when filed by Swan Valley Gas.

The Board is able to approve the proposed customer classes, but cannot approve the actual rates due to the many outstanding items. At a later date, when all components of rates are finalized, the Board will review the requested rates. The Board does find that the requested delivery charge and basic monthly charge are reasonable based on the Swan Valley Gas proposal, and the Board will await confirmation of the component parts prior to approval.

Subsequent to the hearing, it became apparent the brokers had not been served with notice of this hearing. Seeking to rectify this oversight the Board provided for a process whereby each registered broker was served with notice, a summary of the application and all references to brokers throughout the hearing. The process provided brokers with the opportunity to provide their positions, but no brokers took advantage.

The Board has concerns that all customers will not be able to access broker supplied gas and that, currently, only Louisiana Pacific will be able to competitively source its gas from third party suppliers. As a principle, the Board supports a competitive marketplace in the procurement of natural gas. The Board recognizes that Swan Valley Gas has limited resources and is sourcing its customer billing from SaskEnergy. Nevertheless, within two years of the date of this Order, the Board requires the opportunity to purchase third party supply will be available to all customers of Swan Valley Gas.

In keeping with the belief that competition is good for the province, the Board notes that there should exist an adequate level of price transparency with the breakdown of the bill between the basic monthly, delivery, and commodity charges. In the future, the Board may review this for further unbundling and enhancement of the competitive market.

20.8 Customer Connection Fee

The Board will approve the customer connection fee for the four customer classes, excluding contract industrial. The Board will deal with the Louisiana Pacific connection fee when it has had an opportunity to review that contract in the process established to deal with that. The connection fees are appropriately calculated for the different customer classes. The Board will also approve the use of the $300 rebate for residential customers and allow it to be refunded as requested by Swan Valley Gas.

20.9 Terms and Conditions of Service

Because of the late filing of the Terms and Conditions of Service, which includes the proposed Investment Policy for Rural Service Areas, the Board will render its decisions in these matters at a later date, and will follow a similar process to that of the Louisiana Pacific contract process.

20.10 Management Services Agreement

Upon reviewing the detailed schedule of the Management Services Agreement, the Board considers the annual payment of approximately $80,000 by Swan Valley Gas to SaskEnergy as a reasonable cost to procure many of its construction, management and operational services. Given the scope of services to be rendered from the parent company, the Board considers this an appropriate affiliate transaction and will therefore approve it as applied for under s.82 of the *Public Utilities Board Act*.

20.11 Funding

The Board is unable to comment on the federal or provincial funding because the agreements have not been finalized and filed with the Board.

With respect to the municipal funding by the five local governments, the Board notes each government has passed the appropriate by-laws and has even delivered its portion of the funding as required on June 1, 2000. The Board considers the municipal governments to have weighed the commitment of their resources, balanced it with the direct benefits to the community, and considered the increase of the mill rate upon the taxpayers. Furthermore, all residents may receive indirect benefits from natural gas based upon the municipal funding.

20.12 Regulation

The Board considers that the appropriate model for regulating a public utility with a customer base the size of Swan Valley Gas is least cost regulation. The Board has established least cost regulation to regulate Stittco Utilities Man Ltd. in Thompson and the Gladstone Austin Natural Gas Co-operative precisely for the issues to be encountered by this size of public utility and to contain costs. Therefore, the Board will approve the Swan Valley Gas application for least cost regulation.

Accordingly, the Board will reject the alternative application for a deferral account for regulatory expenses. The Board will not permit the establishment of a deferral account for taxation. Should major changes be required due to income taxation, then Swan Valley Gas is encouraged to apply to the Board at that time for regulatory relief. The Board will permit the establishment of a deferral account for gas purchase variances and will work with Swan Valley Gas to establish principles and timelines for its disposition.

20.13 Franchise Agreements

Under section 89 of the *Public Utilities Board Act*, any franchise granted to a public utility by any municipality must be approved by the Board unless that franchise is granted by an Act of the Legislature. Approval of a franchise agreement is to be given after a public hearing in which the Board hears the concerns of the public. In approving a franchise the Board is to consider whether the franchise is necessary and proper for the public convenience and properly conserves the interests of the public.

All five franchise agreements were filed with the Board at the hearing. In cross-examination, witnesses stated these were the same as the generic franchise agreement. Upon further review, the Board noticed several discrepancies between these franchise agreements and that approved by the Board in Order 109/94. The Board will approve the franchise agreements conditionally subject to Swan Valley Gas making the franchise agreements conform completely to the generic franchise agreement approved in Order 109/94. Swan Valley Gas is encouraged to speak to the Board to determine the exact wording deficiencies and then Swan Valley Gas will be required to resubmit the amended franchise agreements to the Board for final approval.

20.14 Cost of Capital

The Board heard limited evidence on cost of capital and risk and the returns. The Board agrees that the project's risks, including a small customer base, one large industrial customer with a five year contract and a greenfield utility with rates fixed for five years, are significant. The Board therefore finds the requested 65:35 debt: equity ratio, the requested 11% rate of return on equity, and the overall rate of return of 8.4% to be reasonable and appropriate in the circumstances.

While the 11% rate of return on equity is higher than that allowed by the Board for Centra and included in the recent expansion by Centra into the Interlake, it is less than that for Stittco Utilities Man Ltd. Further while the rate of return on equity is also different from that used for the Many Islands Pipeline project falling within the jurisdiction of the National Energy Board, the Board does not accept that the return on equity used by another jurisdiction should be determinant of an allowed rate of return for a utility under the Board's jurisdiction. Given the nature of this application, especially the greenfield nature, the customer mix (i.e., one large volume user with the balance largely residential), coupled with the five year fixed rate proposal, the Board will approve 8.4% as the appropriate and reasonable overall rate of return.

IT IS THEREFORE ORDERED:

1. The Application by Swan Valley Gas Corporation BE AND IS HEREBY APPROVED SUBJECT TO all the requirements as noted hereunder being fulfilled satisfactory to the Board prior to July 1, 2002.

2. Swan Valley Gas file an updated feasibility test reflecting updated information resulting from the customer reaffirmation process;

3. The construction of the transmission and distribution system BE AND IS HEREBY APPROVED subject to

   a) Swan Valley Gas achieving minimum customer sign-ups equivalent to projected two year annual volumes included in the feasibility test prior to commencement of construction and submitting proof to the Board;

   b) the provincial and federal funding agreements be satisfactory to the Board and the contributions by the federal and provincial governments be in the amounts indicated in the feasibility test.

   c) the National Energy Board approving the Many Islands Pipeline application as filed;

   d) submitting final construction drawings to the Board for approval prior to constructing the system;

   e) filing final “As Built” record drawings upon completion of construction;

   f) Swan Valley Gas filing with the Board proof of all pre-requisite environmental approvals, railway crossings and water course crossing permits, construction permits, National Energy Board approval, construction permits and other licences as may be necessary and required by other agencies, prior to the commencement of construction.

g) Swan Valley Gas provide the Board's Technical Advisors with further required information on the standards and procedures.

4. The depreciation rates filed BE AND ARE HEREBY APPROVED.

5. The affiliate transactions with SaskEnergy for Management Services and Gas Purchasing and Managing Supply, TransGas for transportation and Many Islands Pipeline for transportation BE AND ARE HEREBY APPROVED subject to

   a) National Energy Board approval of the Many Islands Pipeline application as filed and filing the decision with the Board;

   b) filing the posted TransGas transportation tariff with the Board; and

   c) filing with the Board executed copies of all affiliate transaction contracts in the same form and content as currently filed.

6. The classification of customer classes BE AND IS HEREBY APPROVED.

7. Rates for the basic monthly, delivery and commodity charges BE AND ARE HEREBY DENIED. Upon finalization of all components of each individual charge, Swan Valley Gas should file a revised rate schedule for Board approval.

8. Within two years of the date of this Order, Swan Valley Gas provide all customers with the opportunity to purchase third party gas supply.

9. The customer connection fees for residential (including $300 rebate), commercial, general service and institutional customers as set out on page 19 of this Order BE AND ARE HEREBY APPROVED.

10. The Terms and Conditions of Service and the Louisiana Pacific contract are to be reviewed by the Board and a decision to be rendered at a later date.

11. Swan Valley Gas file with the Board all executed funding agreements with the provincial and federal governments.

12. The procedure for least cost regulation for future rate applications, as set out in Appendix III BE AND IS HEREBY APPROVED.

13. The request to establish regulatory expenses and income tax deferral accounts BE AND ARE HEREBY DENIED.

14. The request to establish the purchased gas variance deferral account BE AND IS HEREBY APPROVED.

15. The five Franchise Agreements as filed BE AND ARE HEREBY APPROVED subject to

    a) Swan Valley Gas revising the five Franchise Agreements in accordance with the form and content set out in Board Order 109/94;

    b) final review of the five Franchise Agreements when filed with the Board; and

    c) execution by each of the five municipalities.

16. A 65:35 debt:equity ratio, an 11% rate of return on equity, and an overall rate of return of 8.4% BE AND ARE HEREBY APPROVED.

17. This Order will expire on July 1, 2002 unless all conditions as set out above are satisfied and confirmed by subsequent Order of the Board.

THE PUBLIC UTILITIES BOARD

Chairman

Acting Secretary

16. A 65:35 debt:equity ratio, an 11% rate of return on equity, and an overall rate of return of 8.4% BE AND ARE HEREBY APPROVED.

17. This Order will expire on July 1, 2002 unless all conditions as set out above are satisfied and confirmed by subsequent Order of the Board.

THE PUBLIC UTILITIES BOARD

“G.D. FORREST"
Chairman

“H.M. SINGH”
Acting Secretary

Certified a true copy of Order No. 93/00
issued by The Public Utilities Board

Acting Secretary