#### **NOVA SCOTIA UTILITY AND REVIEW BOARD**



# IN THE MATTER OF THE GAS DISTRIBUTION ACT

- and -

IN THE MATTER OF AN APPLICATION by HERITAGE GAS LIMITED for the approval of amendments to its Schedule of Rates, Tolls and Charges and Service Rules

**BEFORE:** 

Roland A. Deveau, LL.B, Panel Chair Kulvinder S. Dhillon, P. Eng., Member Murray E. Doehler, CA, P. Eng., Member

**APPLICANT:** 

HERITAGE GAS LIMITED John C. MacPherson, Q.C. Noelle England, LL.B.

**INTERVENORS:** 

**CANADIAN OIL HEAT ASSOCIATION** 

Gary Highfield, P. Eng.

David Graham

**ECOLOGY ACTION CENTRE** 

Cheryl Ratchford

HALIFAX REGIONAL MUNICIPALITY

Martin C. Ward, Q.C. Mary Ellen Donovan, LL.B. Julian Boyle

NOVA SCOTIA POWER INC.

Nicole Godbout, LL.B.

**NOVA SCOTIA DEPARTMENT OF ENERGY** 

Stephen T. McGrath, LL.B. Scott McCoombs

Bill O'Halloran, P. Eng.

QUETTA INC.

John H. Reynolds, P. Eng.

**CONSUMER ADVOCATE** 

John Merrick, Q.C.

William L. Mahody, LL.B.

**BOARD COUNSEL:** 

S. Bruce Outhouse, Q.C.

**BOARD COUNSEL'S CONSULTANTS:** 

Multeese Consulting Inc. Melvin C. Whalen, P. Eng.

**Energy Consultants International Inc.** 

James D. Sandison Brady S. Ryall, P. Eng.

**HEARING DATE:** 

December 1 and 2, 2008

**CLOSING ARGUMENT:** December 17, 2008

**DECISION DATE:** 

February 12, 2009

**DECISION:** 

Pursuant to Section 22 of the Gas Distribution Act, the Board approves Heritage's Schedule of Rates, Tolls and

Charges and Service Rules as amended.

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#### I BACKGROUND

- Heritage Gas Limited ("Heritage" or "Company") was awarded a full regulation class franchise for a period of 25 years in the counties of Cumberland, Colchester, Pictou and Halifax, and the Municipality of the District of East Hants and the Goldboro area of Guysborough County, by the Governor in Council on February 21, 2003. The Board approved, subject to the approval of the Governor-in-Council, the grant of a full regulation class franchise to Heritage in a decision dated February 7, 2003 (the "Franchise Decision"): see 2003 NSUARB 8. On June 3, 2003, Heritage formally accepted the franchise and since that time has been developing the distribution system for local natural gas delivery within the franchise area.
- [2] The Board has approved, on three separate occasions, the distribution rates for Heritage. The first approval was for interim rates on December 19, 2003. The second, following a rate study and application in 2004 (GTA-04), was approved in a Board Decision reported at 2004 NSUARB 72 (2004 Rate Decision), which set rates effective as of November 1, 2004 for a five year period.
- [3] The Board approved a further application (GTA-06) in a decision reported at 2006 NSUARB 142 (2006 Rate Decision), which set rates effective January 1, 2007 for a five year period.
- [4] The current Application (GTA-08) ["Application"] was filed with the Board on September 2, 2008 for an increase in all rate classes with a three year test period from January 1, 2009 to December 31, 2011. Heritage also seeks approval of an amendment to its Service Rules.

- Heritage called three witness panels dealing with rates and general policy matters, rate design and rate of return. All three panels included Ray Ritcey, President and Chris Smith, Vice-President, Finance and Business Services. The rate design panel (also referred to as the cost of service study or "COSS" panel) also included Nigel Chymko and Michael Turner, President and Project Manager, respectively, of Chymko Consulting Ltd. ("Chymko"). They were both qualified by the Board to provide opinion evidence on cost of service and rate design. The rate of return panel included Kathy McShane, Foster Associates Inc., who was qualified by the Board to provide opinion evidence on cost of capital and return on equity.
- Several intervenors played an active role in the hearing by cross-examining the panels and filing final submissions, including the Nova Scotia Chapter of the Canadian Oil Heat Association ("NS-COHA"), Halifax Regional Municipality ("HRM"), Nova Scotia Department of Energy ("NSDOE"), the Consumer Advocate ("CA"), and Quetta Inc. ("Quetta"). The Ecology Action Centre and Nova Scotia Power Inc. requested formal standing but did not participate in the hearing process.
- [7] Board Counsel called Melvin C. Whalen, P. Eng., President of Multeese Consulting Inc., as well as James D. Sandison, BSc., C.A.S.I., President of Energy Consultants International Inc. ("ECI") and Brady S. Ryall, P.Eng., also of ECI, as expert witnesses. Mr. Whalen was qualified by the Board to provide opinion evidence on regulatory matters, including rate design. Mr. Sandison and Mr. Ryall were qualified to provide opinion evidence respecting regulatory matters, including natural gas regulation.

[8] The Board has approved the Application, subject to Heritage filing a compliance filing which reflects the suspension of depreciation ordered herein. The Board has also issued directives to Heritage as outlined in the decision.

#### II THREE YEAR TEST PERIOD

- [9] Heritage has requested approval of a three year test period starting January 1, 2009 and ending December 31, 2011. The test period in GTA-06 was approved for five years, also ending on December 31, 2011. The current rate Application would supplant the 2006 Rate Decision to the extent of the overlap.
- [10] In the 2006 Rate Decision, the Board noted that:

Heritage was questioned about their confidence that it would not have to be back to the Board until after the five year period. The response was:

... we are getting better and stronger every day, we are listening to and learning from our customers and suppliers and stakeholders. ... We've overcome a number of issues that three years ago in May 2004 we didn't think that we'd be dealing with it through our current test period, ... As we go forward we have the experience of three years, we've factored it into the models, the financial models that are provided before you, and again we believe that they are realistic compared to — at least at this point in time based on what we know as to how that future could unfold. [Para. 16]

[11] In its response to ECI's IR-2, Heritage explained what triggered this Application to amend rates approximately one and a half years into the approved five year test period:

Heritage Gas ... has a much better understanding of its market today than at anytime previously in its relatively short history. The size of the market, the rate of customer attachments, the amount of the fuel utilization have been less than expected and when coupled with increased costs to reach this customer base the combination results in a growing Revenue Deficiency Account (RDA) balance. As a result, conditions have changed significantly resulting in this Application by Heritage Gas.

[ECI IR-2, p. 1]

[12] ECI supported the proposed three year test period, provided Heritage file semi-annual financial reports with the Board:

ECI believes that the three year test period from January 2009 to December 2011 is an appropriate duration, since Heritage requires at least three years to develop its system on peninsular Halifax. This is the next stage of the test period that was approved in GTA-06 and which ends in 2011. It will take more than a year to connect committed customers, obtain more customer commitments, and flow gas to peninsular Halifax customers in order to determine attachment rates, typical average consumption, and resulting gas distribution margin. If a shorter test period was used, then Heritage would be at a disadvantage when trying to estimate the attachment rate and consumption for its newly installed pipelines on peninsular Halifax. The timing of the proposed Rate Class 3 attachments is crucial to Heritage's Business Plan and they dramatically affect the company's gas distribution margin. (Ref. Application p.3-3, ECI-IR-2a, and ECI-IR-10b). The proposed three year test period coincides with the first full year impact from the Rate Class 3 customers. This will give Heritage a considerably more realistic view of their revenues in the future. The Board should be kept apprised of the success of Heritage's Business Plan. Therefore, approval of this test period should be contingent upon Heritage continuing to provide the Board with updated financial models, and we recommend this be done on a semi-annual basis.

[Exhibit HG-10(a), pp. 4-5]

[13] In the 2006 Rate Decision, paragraph 23, the Board directed Heritage to file an annual report no later than 180 days following each fiscal year end:

To monitor the situation, and as a condition of approval of the five year test period, the Board will require annual filings in more detail than is now provided. The Board will be looking for an annual filing of actual revenues and actual number of customers by class and average usage by class as compared to the assumptions used in this rate application. The Board will also require that this data be incorporated into the forecast for the remainder of the five year test period. Any major deviations from the current application should be identified and explained.

[14] The NS-COHA also recommended approval of the three year test period and suggested that Heritage continue to file updates of its financial results versus its projections.

### **Findings**

[15] While the Board observes that Heritage filed this Application with the Board before the completion of the five year test period contemplated during the GTA-06 hearing, the termination of the proposed three year test period coincides with the end date of the five year test period approved in the 2006 Rate Decision. Further, the proposed test period represents a period which is important to the expansion of the distribution system and the projections have been updated with more current data respecting revenues and costs.

The Board approves the three year test period. The reporting requirements previously ordered by the Board for the financial results shall be provided semi-annually. The six month results shall be filed within 90 days and the annual results no later than 180 days after the end of each respective period.

#### III REVENUE MATTERS

### a) Revenue Requirement

## (i) Operating Costs

[17] The projected operating costs for the three test years are as follows:

	Forecast Forecasts [Projections]				
	2008		2009	2010	 2011
Salaries and wages	\$ 3,316,297	\$ 4,13	33,212 \$	4,315,223	\$ 4,457,363
Contractor costs	\$ 61,139	\$ 3	35,000 \$	35,700	\$ 36,414
Transportation	\$ 212,917	\$ 23	31,395 \$	236,680	\$ 241,414
Moving	\$ 43,000	\$ 3	35,000 \$	35,700	\$ 36,414
Marketing	\$ 306,000	\$ 33	30,000 \$	336,600	\$ 343,332
Professional and consulting	\$ 123,009	\$ 37	70,015 \$	226,815	\$ 193,652
Operating Expenses	\$ 845,660	\$ 88	37,451 \$	906,476	\$ 924,606
Office Expenses	\$ 377,600	\$ 39	6,091 \$	405,138	\$ 413,241
Sub Total	\$ 5,285,622	\$ 6,41	8,164 \$	6,498,333	\$ 6,646,436
Amount capitalized	\$(2,937,974)	\$ (3,529	9,990) \$	(3,574,083)	\$ (3,655,540)
	\$ 2,347,648	\$ 2,88	38,174 \$	2,924,250	\$ 2,990,896

[Exhibit HG-1, pp. 10-5, 10-6]

The total of the projected operating costs for 2009, before capitalization, is 38% greater than had been projected in GTA-06. It is also 21% higher than the 2008 forecast total. The two components that have the largest increase in both instances, are salaries and wages, and professional and consulting.

[19] The reasons given by Heritage for the increase in operating costs between the forecast for 2008 and the 2009 projection are as follows:

- An increase in the overall staff complement will be required to address gaps in the permanent staff complement - the total impact of these additions will be \$0.4 million.
  - A junior engineering resource will be added with the expectation that third party contracting costs will be reduced.
  - An additional construction inspector will be added this resource has traditionally been a contract resource and efficiencies will be achieved by hiring the resource permanently.
  - A construction clerk will be added to provide greater efficiency to the construction team.
  - An additional distribution technician will be added due to customer growth.
  - An operations utility technician will be added to accommodate customer growth.
- During 2008 the company has undertaken an in-depth review of its compensation programs. The focus on compensation reflects market pressures on salaries resulting from an increasingly competitive labour market. This is evidenced by the fact that in 2007 and 2008, the company has increased its base salary levels by 4% and 3.5% respectively. In addition as the company has gradually established a Nova Scotia based team of permanent employees, certain employees have been recruited from western Canada due to a lack of local experienced natural gas personnel. Heritage Gas must, therefore, in relation to certain positions, compete on a national basis.
  - The result of the compensation review is a series of recommendations that will see the company address the inadequacies in its policies over the 2009-2011 time frame. In 2009, an overall increase of 7% of 2008 salaries and benefits will be required. Inflation is expected to account for approximately 2% of the 7%. The total impact of these changes will be \$0.3 million over 2008.
- The company will also be engaging consultants to assist in the recruitment of institutional customers and to assist with stakeholder relations. Certain aspects of the human resources consulting process will also continue in 2009. It is expected that this assistance will cost \$0.3 million.
- Other operating costs will increase due to increased staffing levels, an increase in direct marketing related programs and inflation. The overall impact of these changes is approximately \$0.1 million.

[Exhibit HG-1, pp. 10-3, 10-4]

[20] The salaries and wages component of the projected operating costs for the test year 2010 are to increase over the 2009 test year by 4% to reflect the continuation of

the human resource program plus the salary for a Customer Service Representative. All other operating costs are expected to increase by 2%. The above increases are partially offset by a reduction in the professional and consulting expense.

[21] For 2011, the salaries and wages component of the projected operating costs is expected to increase by 3% over the 2010 test year, with all other components increasing by 2%. These increases are, again, slightly offset by a reduction in the professional and consulting expense.

[22] ECI reviewed the operating costs and had the following comments:

Wages and salaries are the largest component of operating expenses. It is difficult to pass judgment on the sufficiency or extravagance of wage and salary increases without independently conducting a compensation review. For its existing staff, the annual wage and salary increases may appear sizeable, but by undertaking a third party compensation review, Heritage has taken appropriate steps to determine compensation and benefit levels for its personnel.

In response to ECI-IR-21, ECI finds that Heritage's other operating expenses including consulting costs and IT costs are not excessive.

[Exhibit HG-10(a), p. 9]

[23] Heritage was questioned by the CA as to how the Company measures the efficiency of its expenditures. In particular, reference was made to various operational metrics. Heritage responded that because it is not a mature utility, any comparable industry metrics would be meaningless:

(Smith) We're not at that stage where we can do that. We — because our service technicians are operating the system but also activating a large number of customers on a regular basis, the volume that they deal with is much more — and the types of tasks that they deal with is a lot different than what a mature utility would do.

So, we -- in time we will be able to develop those types of metrics where we can say on a specific basis based on this generic group of customers this is what our target would be, but we're not at that stage yet.

(Ritcey) And, Mr. Smith, if I can add, it's not just related to the operating costs or the capital costs of our entity, we also try to benchmark against the -- you know, other objectives and key metrics that the Canadian Gas Association uses.

Because of our size and our small base, our metrics don't fit into the size of the mature gas distribution utilities ...

[Transcript, December 1, 2008, pp. 47-48]

Under GTA-06, Heritage was given approval to capitalize certain of the operating costs. The Board decision allows the Company to capitalize 100% of all operating costs that are categorized as marketing, engineering, construction, and regulatory and public affairs. The Application continues this capitalization of functional operating costs as has been previously approved by the Board. In response to an information request about not allowing marketing costs to be capitalized and its impact on rates, Heritage summarized its calculation as follows:

	2009	2010	2011
Original Net Rev. Req.	11,800,329	17,548,566	22,356,430
Add Operating Expenses	1,730,000	1,751,000	1,791,000
Less Depreciation	-25,950	-78,165	-131,295
Less Cost of Capital	-89,443	-266,648	-441,440
Net Revenue Requirement	13,414,936	18,954,753	23,574,695
Additional Rate Increase	14%	8%	5%

[NSUARB IR-2, p. 2]

[25] In its Application, Heritage projects that beyond 2012 capital expenditures will be much lower (approximately \$5.2 million in 2013 versus \$9.5 million in 2012). For 2014 and beyond, capital expenditures are projected to only increase with inflation. The Board

questioned Heritage on whether it would be appropriate to reduce the capitalization of operating costs:

- Q. Yeah, but shouldn't the capitalization go -- should go down, compared to what the capital works are proposed, because then you're comparing apples with apples?
- A. (Smith) That would be a reasonable assertion, and we -- that was just one of the variables where we didn't change anything from the last time we were before the Board. We just maintained the current capitalization policy until the RDA was recovered.

[Transcript, December 1, 2008, p. 221]

[26] Heritage agreed that capital and operating expense forecasts should track each other, and agrees to consider this in its next Rate Application:

(Smith) We were just confirming -- just making sure that Mr. Ritcey and I were in the same wavelength. So I think the point being is that while we've reduced our capital assumptions, we have not reduced our operating expense assumptions. And conversely, if we're going to have this level of operating expenses, then perhaps we should have some recognition of other capital programs and other revenue.

So back to your question, what do we do about that, that's a great question. I don't know.

Q. Well, I'll leave it here, but I'd like you to consider when you come back in 2011 what this might affect in the longer term.

A. Yes.

[Transcript, December 1, 2008, pp. 227-228]

### **Findings**

- [27] As discussed elsewhere in this decision, the Board still considers Heritage to be a "greenfield" utility. Hence the Board, at this time, does not see any benefit in benchmarking operating costs to those of a "mature" utility.
- [28] The Board accepts the projection of operating costs for the three test years, as presented by Heritage, as being reasonable.

The Board approves the capitalization of operating costs in accordance with the formulaic method as approved in GTA-06, up to and including the year 2011. The Board notes, as was mentioned in GTA-06, that using this simplistic method for the capitalization of operating costs does not meet current generally accepted accounting principles ("GAAP") for non-regulated entities. The Board will not accept this method for the capitalization of operating costs after 2011.

[30] To address this change in capitalization policy and to address the effect of reduced capital expenditures in future years, the Board directs Heritage to develop a new policy and submit it on or before December 31, 2010 for Board approval.

The expense section of the Application shows the amount capitalized as a reduction from the total operating costs. In future rate applications, this statement should only show the operating cost portion of the expense categories. The capital expenditure and plant continuity schedules should break out the cost components of the additions and reflect the new capitalization policy. The cost components of the additions should include, as a minimum, third party costs, direct allocations, and indirect applications.

## (ii) Depreciation

[32] As directed in the 2006 Rate Decision, the Company prepared a depreciation study which was submitted as part of its Application. The results of this study are as follows:

For modelling purposes, the Application utilizes the amortization/depreciation rates that were established in 2004, by a similar study conducted by Gannett Fleming, and are disclosed in the notes to the Heritage Gas financial statements. The difference between the two sets of accrual rates is approximately \$26,000 on 2008 amortization/depreciation.

[Exhibit HG-1, p. 15-1]

# [33] In preparing the depreciation study, Gannett Fleming did not consider salvage

### value. As they stated in their report:

The second component of the depreciation rate is an estimate of the net salvage percentage. ... In the circumstances where the plant is abandoned in place or removed an additional cost of removal is incurred.

[Exhibit HG-1, p. 15-5]

### [34] The Company concluded as follows:

While Gannett Fleming views that the Heritage Gas system will eventually require net negative salvage percentages, it is reasonable to use 0% at this time.

[Exhibit HG-1, p. 15-6]

[35] This was explored during the hearing when the Company responded to a question about the salvage value as follows:

(Smith) The only part of the -- the depreciation study that was completed was quite inexpensive. The only additional part that was not addressed this time around, nor was it done in 2004, was some kind of study around salvage values and things of that nature, which we haven't -- or our retirement obligations -- we haven't had any of that yet, so it's hard to do a study on something that we haven't experienced yet...

[Transcript, December 1, 2008, p. 174]

## [36] This explanation was expanded upon by the Company as follows:

(Ritcey) The timeframe for the majority of the assets that we've put in place, they're being depreciated over very long periods of time, and so our expectation is they'll continue to be utilized for a very long period of time, ...

40 to 60 years.

[Transcript, December 1, 2008, p. 200]

## [37] ECI, in its report about the salvage value issue, stated as follows:

ECI compared the Depreciation Study with other depreciation studies performed by Gannett Fleming for other Canadian natural gas utilities. The major difference in the study completed for Heritage compared to the other studies is that the salvage value for Heritage's system is set at zero. ... ECI has no objection to Gannett Fleming selecting a zero salvage value....

[Exhibit HG-10(a), p. 10]

### [38] The Company, in response to an undertaking, calculated the effects on rates

### if depreciation is not charged for the three test years:

Heritage Gas does not consider this scenario appealing because in order to balance rate revenues to match revenue requirement and achieve 1:1 revenue to cost ratios in 2011, it is necessary to reduce Rate Class 3 rates in 2010. Based on the original application, however, Rate Class 3 is known to be below a 1:1 revenue to cost ratio when depreciation is included in revenue requirement. Once depreciation is added back into revenue requirement, Rate Class 3 rates will need to rise again to offset the 2010 reduction.

Without policy direction regarding how the \$9.2 million of deferred depreciation expenses would be recovered after 2011 and presumably before 2019, Heritage Gas does not support this approach to mitigating rate increases. Unresolved issues include:

- 1. whether annual depreciation would 'restart' in 2012,
- 2. how the \$9.2 million of deferred depreciation would be eventually recovered,
- 3. considerations for intergenerational equity relating to the deferred depreciation expense,
- 4. how rate impacts to customers will be mitigated when both annual and deferred depreciation are re-integrated back into the Heritage Gas revenue requirement,
- how additional reporting requirements associated with two sets of accounting records (GAAP and regulatory) will be administered.

In addition to the reservations noted above (1-5) it should be noted that Heritage Gas is not completely satisfied with the analysis that has been completed on this scenario. This scenario results in a reduction in cash inflowing to the business in order to offset a reduction in a non-cash expense. While the impact on rates due to the reduction in revenue requirements associated with the lower depreciation has been reviewed, the impact on rates due to additional cash requirements for the enterprise over the 2009-2011 time period, has not been completely analysed.

[Undertaking No. 15, p. 5]

## [39] Mr. Whalen commented on the possibility of deferring depreciation as follows:

Ultimately you need to get the depreciation completely recovered. If you defer depreciation for three years, I can't think of anything that is particularly catastrophic about that. Depreciation gets updated on a fairly regular basis through depreciation studies.

Again, you'd have the option of saying if I defer it three years I'm still going to keep the life of the assets to be the same so that on the back end it goes out three years, or if you just lobbed three years off and completely recover it would have a minor impact on your depreciation going forward.

[Transcript, December 2, 2008, p. 594]

### **Findings**

[40] The Board approves the depreciation study as filed by Heritage and the rates therein.

[41] Unlike the *Public Utilities Act*, the *Gas Distribution Act* does not give the Board authority over how Heritage uses the cash flow from the depreciation charges. As such, there is no depreciation cash fund established for the benefit of ratepayers.

As stated later in this decision, the Board is concerned about the achievability of the revenue projections and its potential negative impact on the Revenue Deficiency Account ("RDA"). To provide a cushion against any potential shortfall in revenue projections, and to help ensure that the RDA cross-over and elimination occurs within the timeframe outlined in the Application, the Board orders that depreciation charges be suspended in the revenue requirement for the three year test period. As noted later in this decision, the Board has decided that this suspension will not alter the requested rates. The depreciation charges will resume in 2012, and beyond, unless the Board determines otherwise.

[43] Evidence has been provided that the assets now being installed have a very long life (i.e., up to 60 years). Heritage has not attributed any salvage (either cost or value) to the amount of the total plant, which is subsequently used for the determination of depreciation charges. With more experience, and an updated depreciation study to be included in the next rate application, Heritage believes that it will have sufficient information to determine what the salvage amounts should be for its assets.

[44] The new depreciation study should incorporate the suspension of depreciation charges, the remaining economic life of plant in service, and the salvage in order to calculate the depreciation charges in the revenue requirement after 2011.

### (iii) Return on Equity and Capital Structure

The Application proposes to maintain the return on debt of 8.75% and the return on equity of 13.0%. It also proposes to maintain the debt to equity ratio of 55:45. These returns and the debt to equity ratio were established by the Board in the Franchise Decision. The Company does not believe that today's financial risks are any less than they were then:

(Smith) ... I mean I guess I'd like to go back to the principles under which the franchise were accepted by the shareholders and Ms. McShane was involved in setting the established rates at that time. She did a complete study in terms of what was agreed upon and the shareholders moved forward, made an investment in this business based on that and it is fundamental to compare the risk factors that were in place at that time and where we are today. And that's really what — why Ms. McShane is here. So I think it's the risk that was in place in 2004, when the franchise was accepted and moved forward with that fundamentally has not changed.

[Transcript, December 2, 2008, p. 503]

- [46] In the pre-filed rebuttal evidence of Ms. McShane, the risk factors were discussed:
  - Q. Has anything occurred since the franchise decision and the first tolls and tariffs decision which indicate that Heritage faces lower risk than was anticipated?
  - A. No. In fact, it has proven more difficult to attract the market on the timeline which Heritage initially forecast, as Heritage has indicated in this GTA (See pages 2-4 to 2-8 of GTA application) and in the 2006 GTA.

[Exhibit HG-13, p. 4]

[47] Part of the financial risk identified in GTA-06 was the extension of the complete retirement of the RDA to 2019. This was an important factor in Heritage's consideration of its expansion in the Halifax market. As was stated:

(Smith) There was a desire to confirm with this Board that the ability to continue to utilize the revenue deficiency account would be extended from the original plan of 2008 to what was then proposed as 2019, prior to proceeding with that capital investment into Halifax. ...

And with that endorsement of this Board with the extension and the recovery period of the RDA, the decision was then made, ... an expansion to Halifax would occur. But it was with that assurance from this Board that the RDA would be -- continue to be utilized until 2019, or until it was recovered, that was an important consideration at the time.

[Transcript, December 2, 2008, p. 507]

[48] It is posited by Ms. McShane that this may change if Heritage is considered to be a "mature" utility. In a footnote to her pre-filed rebuttal evidence, she supplied the following potential description of the factors for distinguishing between "greenfield" and "mature" utilities:

In response to British Columbia Utilities Commission Information Request No. 1, Question 41 in Terasen Gas Inc. and Terasen Gas (Vancouver Island) Inc.'s Application regarding ROE and Automatic Adjustment Mechanism, the company cited four conditions which indicate that a utility has transformed from a "greenfield" to a mature utility: (a) it is able to set rates for different customer classes at revenue/cost ratios of approximately 1.0, and is no longer reliant on price-setting mechanisms that expressly set rates to be competitive with alternative energy sources; (b) its customer growth rates have reached levels that are in line with those of mature utilities; (c) it has been able to recover the preponderance of any accrued revenue deficiencies; and, (d) the excess capacity originally built into the system to accommodate future growth and take advantage of economies of scale has been reduced to a minimal level.

[Exhibit HG-13, pp. 8-9]

[49] When Ms. McShane was questioned as to whether this definition of a "mature" utility is appropriate or not, she stated as follows:

They are not authoritative criteria because I don't think that there have ever been enough green field utilities to warrant having adopted a specific set of criteria for that purpose.

- Q. So if the Board were looking for a criteria as to when it should consider Heritage a mature utility, what should it be looking for?
- A. (McShane) I think these -- I can't think of any other criteria that would fit the bill, so it seems to me that these would work, recognizing that it's not, you know, one -- if they meet one, then it's a mature utility. It really is looking at the composite of the four. And having said that, it's still going to be a matter of some judgement as to whether maturity has been reached.

[Transcript, December 2, 2008, p. 526]

[50] The Company addressed the issue as to whether they should be considered as a "greenfield" or a "mature" utility:

(Ritcey) ... In terms of the overall marketplace, though, even in 2011, in terms of the total potential of the marketplace, we're still a fairly -- you know, we still have a fairly small footprint in that marketplace, but at that point in time, in terms of how we operate, how we operate our system, how we build out our pipe, we would be characterized as a, you know, mature operating utility, again with more growth coming to the organization as we continue to build out the system.

A. (Smith) And the only other point I would make on that is that I would not suggest that we're a mature utility until we've completely recovered the revenue deficiency account.

[Transcript, December 1, 2008, p. 236]

- [51] The matter of whether the RDA, and its change in status (cross-over and/or elimination), would be a milestone on the way to being a "mature" utility was explored:
  - Q. If you've reached the point where you are recovering your RDA as opposed to amassing it, would that be a milestone, a very significant milestone in terms of whether or not the utility has matured?
  - A. (McShane) I think it's a milestone, but I don't think that having reached that crossover point would be an indication that you've reached maturity because there's still a chance that you could flip back the other way.

[Transcript, December 2, 2008, p. 527]

[52] Regardless as to whether the Company is a "greenfield" or a "mature" utility, questions were raised about its allowed return on debt. Of particular concern was whether the shareholder loans could have been financed by a bank at a lower rate. Ms. McShane commented on the cost of debt as follows:

And Mr. Smith quite correctly said that there was -- I'm probably putting words in his mouth -- little chance that they could have gotten debt at a better rate through going to the bank.

And even if -- from my perspective, even if they could have gotten it at the same rate, chances are that they would have had to incur much more stringent covenants on that debt.

One of the ones that one sees most frequently is that they would have to repay that debt year after year, you know, in equal amortizing amounts so that they would have to come up with the cash every year, to bring down the balance of that debt.

[Transcript, December 2, 2008, p. 517]

[53] Ms. McShane was questioned about the equity risk premium for a "greenfield"

- Q. All right. So, that's what we would find across the country. With respect to the Greenfield risk premium, back in 2003 you had pegged that between 2.5 and 4.5?
- A. Yes.

utility:

- Q. And it's your position that the Greenfield risk still applies to this utility?
- A. Yes.
- Q. And what do you put that premium at today?
- A. (McShane) I don't particularly have any reason to conclude that it would be significantly different. If I look at what some of these new pipelines are negotiating for new investments, it seems that that's in the ballpark.

[Transcript, December 2, 2008, pp. 538-539]

- [54] There is a reduced need for a risk premium for a "greenfield" utility as it becomes "mature". As explained by Ms. McShane under questioning:
  - Q. And then the item that -- the premium you were paying for Greenfield would disappear once Heritage Gas becomes a mature gas utility, which there's no true definition other than we have one here, the Terasen Gas VI, I came up with.
  - A. Well, that's a two-part question. Let me try each part separately.

I would say that as a mature utility then, yes, you'd no longer need a premium for a Greenfield, and with respect to the other part, that being these criteria for being a mature utility, they came up with them because they were asked by their regulator to define what constitutes a mature utility.

Those criteria were set forth, those criteria, to my recollection, were not contradicted in any way. The BCUC did not take exception to them, and I -- you know, I think, from my own perspective, they cover the circumstances that would define what's mature quite well.

[Transcript, December 2, 2008, pp. 544-545]

[55] However, the risk premium does not suddenly drop to zero once a utility is "mature". It is a gradual process. As explained by Ms. McShane:

I think that's fair, and it's a very good point that you would expect the risk profile to gradually develop over time, and that if everything goes as planned, then the business risk should gradually fall toward the level of a mature utility.

[Transcript, December 2, 2008, p. 554]

[56] A consultant for the CA, in pre-filed evidence, had calculated the effect on revenue requirement if the return on equity was reduced by 1%. Heritage addressed this issue as follows:

Heritage does not believe that this scenario should be considered as there has been no evidence provided that would suggest that the current return on equity is inappropriate. The risk factors that were enunciated at the time of the Franchise Application remain in place. In fact, it could be argued that under the current economic environment, the return on equity should be increased.

[Heritage Post-Hearing Submission, p. 14]

### [57] The Consumer Advocate requested:

... that the Board address the material concerns related to the authorized rate of return by commissioning a broad rate of return study to be completed for consideration prior to the end of 2009 so as to allow for adjustment of 2010 and 2011 rates as required.

[Consumer Advocate Post-Hearing Submission, p. 7]

# [58] In its post-hearing rebuttal submission, the Company stated:

Heritage submits that all of the evidence currently before the Board confirms that the rate of return of 13%, in the context of a debt equity ratio of 55:45 and a cost of debt of 8.75%, as approved in the Franchise Application, continues to be appropriate and, if anything, is lower than that which Heritage should receive in the current environment.

[Heritage Post-Hearing Rebuttal Submission, p. 6]

#### **Findings**

[59] At paragraph 84 of the Franchise Decision, the Board stated:

... The Board notes that the approved ROE and debt equity ratio will be subject to review at the conclusion of the five year initial period in any event and possibly earlier should circumstances warrant.

The Board understands that if the ROE is reduced by 1%, as calculated by the CA's consultant, the revenue requirement would decrease, with a subsequent overall reduction of costs to ratepayers. No evidence was submitted to suggest what an alternative return on debt or equity should be. Nor was there any suggestion about changing the debt to equity ratio. To the contrary, evidence was submitted by Heritage that supports the present capital requirements and returns and suggests that, maybe in today's economic environment, they could be considered low. Therefore, the Board finds that the return on debt and equity, as well as the debt to equity ratio, should be maintained at this time. However, the Company is ordered to file a complete study on these matters for the next rate hearing.

The Board also recognizes that the Company is far from being considered a "mature" utility. Heritage has stated that it is still in a "greenfield" status. As it slowly increases its serviced area, it will eventually become a "mature" utility. The Board accepts Ms. McShane's evidence that there is no hard and fast definition as to what is a "mature" utility. The Board does take some guidance from the definition developed by Terasen Gas, which was referred to by Ms. McShane.

The Board accepts that there is a risk premium on the return on equity for a "greenfield" utility. The Board expects that this premium will reduce as Heritage approaches maturity. The Board does not expect that this elimination of the "greenfield" risk premium will occur as soon as the Company becomes a "mature" utility. Accordingly, the Board orders the Company, as part of the next rate application, to develop a set of criteria along with definitions, as to when it would consider itself to be a "mature" utility. In addition to the requirement to define what is a "mature" utility, the Company needs to identify the transition milestones which Heritage should meet as it moves from a "greenfield" to a "mature" utility.

### b) Revenue Projections

### (i) Past Revenue Projections

[63] Heritage, at this time, is a "greenfield" utility and it cannot generate sufficient revenue to meet all of its financial requirements from the present customers. The Board recognizes this and has allowed the Company to record the revenue shortfall in the RDA. A major element in determining the addition to (or subtraction from) the RDA in any one year is the actual revenue earned. In both GTA-04 and GTA-06, the Company was overly optimistic in projecting the amount of revenue that it would earn. As stated in this Application:

The research over estimated the number of customers that would be captured in the initial development of the franchise and it over estimated the amount of revenue that those customers would generate.

The research also assumed that customers would consume larger quantities of natural gas than they actually are using.

[Exhibit HG-1, p. 2-9]

[64] Heritage attributes its under achievement of projected revenue to two main factors - fewer customers and low average consumption per customer.

[65] The number of customers has been less than planned. As stated in Heritage's post-hearing submission:

As set out in more detail in the Application, the number of customers both able and willing to commit to natural gas within the "footprint" of the Heritage franchise was smaller than originally understood.

[Heritage, Post-Hearing Submission, p. 6]

[66] It is also noted that the Company had to invest more in infrastructure to reach its customers. As was stated by Mr. Smith:

We went - - we had to invest more to get to a smaller base of potential customers.

[Transcript, December 1, 2008, p. 252]

[67] To compound the problem, not only did the Company fail to meet its projected number of customers, but the amount of natural gas consumption per customer was also less than anticipated. As stated by Mr. Ritcey:

I believe that there was other evidence that was filed that shows the declining trend in consumption, I think, broadly based across North America.

And to the point that you raised, a very good point, with the advancement of new technologies out there, we continue -- we continue to see that those new technologies coming into the marketplace, and our expectation is you will, you know, continue to see the adjustments in the forecast that we have, or the use of consumption. Or the amount that's consumed, sorry.

[Transcript, December 1, 2008, pp. 165-167]

[68] Heritage described in detail the assumptions for growth that were made for this Application in its reply to ECI's IR-2. As part of its revenue assumptions, Heritage has reduced the expected consumption per customer. As was summarized in its post-hearing submission:

In GTA-04 residential consumption was expected to average 131 GJ's annually. In this Application Heritage forecasts that residential customers will consume approximately 95 GJ's per year.

Part of the reason for this decreased consumption is a general North American trend towards declining energy use of all types, including natural gas. This has resulted from a greater awareness of energy conservation as well as improvements in building insulation methods. (Application, page 2-7 and Response to ECI-IR-4, "Declining Average Customer Use of Natural Gas: Issues and Options, Report by INDECO")

In addition, the decreased consumption of natural gas has also been impacted by the efficiency of natural gas appliances.

[Heritage, Post-Hearing Submission, p. 5]

[69] The prudence of this approach is supported by the evidence of Ms. McShane:

In sum, the persistent decline in customer usage in the natural gas industry is a well recognized phenomenon which needs to be recognized at the very least in the development of the load forecast and rates. To ignore the trend would unnecessarily increase Heritage Gas' risk of not recovering its cost of service. A reasonable approach to deriving the load forecast and proposed rates would be to rely on the experienced downward trend in per customer usage as a proxy for the test period.

[Exhibit HG-1, p. 2-13]

### **Findings**

[70] The Board is encouraged that Heritage has learned from an analysis of its present situation why its previous revenue projections have not been met. The Board accepts the Company's analysis which indicates that projected revenues have not been achieved because:

- (a) the Company overestimated the number of customers it could connect for the amount of pipe that was installed; and
- (b) a North American trend to lower consumption per customer which is beyond the control of the Company.

### (ii) Achievability of Future Revenue Projections

[71] The key component of this Application is whether Heritage can meet its future revenue projections. Heritage has not demonstrated a good understanding of its customers, nor an ability to determine realistic revenue projections. As stated at the hearing:

(Smith) ... But the company does acknowledge that things change in terms of the way that we do our projections. Not intentionally, but that things do not unfold always the way that we expect them to.

[Transcript, December 1, 2008, pp. 51-52]

### [72] Heritage stated:

...

(Smith) ... what we've done today, over the last five years is quite a bit more infrastructure is in the ground. We've also been able to learn from the customer base that has been established.

(Ritcey) ... As I said earlier, we have a lot better understanding of the marketplace today ...

In addition, we're looking to the large anchor customers that we had ... to come to the system in the timeframe that we've identified.

We've adjusted the consumption factors attached to the customers that we expect to come to the system. We're not as fortunate as some of the other mature utilities that have a significant customer base and don't really look at major fluctuations from year to year.

[Transcript, December 1, 2008, p. 72 and pp. 238-239]

[73] As part of its strategy to attract new customers, the Company is looking at ensuring that it has as low an operating cost as possible. Heritage stated:

(Ritcey) I gave an example in terms of what we do on the capital front. We're trying to do that on the operating side. In terms of how we do -- how we interact with people, whether it's in the sales and marketing area or the engineering, construction and operations area, we are continuously looking at ways to reduce our costs so that we can limit the amount of costs so that we can reduce the economic tests that we need to pass so that we can continue to build out our pipeline.

It is not in our interest to have a higher cost base, it's in our interest to have the lowest cost base possible so that we can extend our system in a prudent and responsible manner.

[Transcript, December 1, 2008, p. 45]

### [74] Heritage has also reorganized its strategic approach to develop revenues:

(Smith) And they wanted the salespeople at the time to be very, very focused on the activity that got customers to sign DSAs, and to have the Customer Service Group very, very focused on the activation, rather than kinds of both groups crossing those lines from time to time in the past.

[Transcript, December 1, 2008, p. 171]

[75] Heritage expects to have a total of 3,298 customers in 2009. This is an increase of 1,256 from the 2008 forecast number of customers. This number of new customers was supported by the information given in an undertaking:

#### Customers on Existing Mains or Proposed 2009 Mains

Committed Customers (DSA Signed)

		TOTAL		
	Count	GJ	Revenue	
RC1	293	227,954	\$	1,426,681
RC2	21	190,869	\$	508,829
RC3	2	585,330	\$	787,016
Res	260	24,960	\$	205,446
Total	576	1,029,113	\$	2,927,972

**High Probability Customers** 

	TOTAL			
	Count	GJ	Revenue	
RC1	123	95,694	\$	598,914
RC2	0	-	\$	-
RC3	0	-	\$	-
Res	39	3,744	\$	30,817
Total	162	99,438	\$	629,731

2009 Projected New Sales

	TOTAL			
	Count	GJ	ſ	Revenue
RC1	130	101,245	\$	633,629
RC2	5	42,649	\$	114,995
RC3	-		\$	-
Res	383	41,504	\$	330,962
Total	518	185,398	\$	1,079,586

[Undertaking No. 13]

[76] To improve the acquisition of new customers, the Company has made changes in its marketing plans and processes. As was stated by Heritage:

(Ritcey) ...we have a number of tactical plans in terms of the customer attachment process that we had but they were not of the -- sufficient rigour as to the kinds of plans that we're developing today.

We introduced more rigour to the whole process starting in 2007, and certainly in 2008, where we have — we've developed a process, you know, starting from our business plan and budget, we have strategic objectives, we have tactical plans either in place or being developed to achieve on those strategic objectives, and we have metrics in place now directly linking to those objectives across the board from the top of the organization down.

[Transcript, December 2, 2008, p. 442]

[77] The Company has not developed these strategic objectives and tactical plans in a vacuum. As they explained in the confidential part of the hearing, they have undertaken studies, such as focus groups and surveys. These studies are used to confirm the market size and understand the decision drivers used by potential customers.

[78] Heritage stated that these new plans are not fully in place, but they are being developed. Heritage also filed, as Confidential Undertaking No. 25, its Business Plan for the years 2009 to 2011. In this Business Plan the actual sales targets were further broken down into tactical initiatives. It also outlined how compensation to employees is geared to

achieving these targets at all employee levels. The Business Plan is dated October 2, 2008, but includes components that were dated November 2008 and January 2009. This suggests that this is a plan very much in transition as it is being currently developed and finalized.

[79] The post-hearing submission of NS-COHA made the following recommendation:

Accordingly, NS-COHA recommends that the Board accept the proposed three (3) year test period but continue to require Heritage to file annual updates of its proposed forecast versus actual experience as was required in the Board's last decision (NSUARB-NG-HG-06) and a commentary on how any material difference may affect the company's rates in the future.

[NS-COHA Post-Hearing Submission, pp. 3-4]

### **Findings**

[80] The evidence submitted by the Company indicates that a significant amount of time has been spent on how to realize the revenue projections. It appears to the Board that Heritage has matured from a "Build it and they will come" approach to a targeted plan of actively pursuing customers. Nevertheless, the Board is still concerned that these projections may not be achieved.

[81] Accordingly, the Board orders the Company to file, on an annual basis within 180 days of year-end, the achievement of sales targets comparing actual results to the targets as outlined on pages 3 and 4 of Confidential Undertaking No. 25. The Board also orders Heritage to explain the variances and what actions, if any, are being taken to correct any shortcomings. As well, Heritage shall file the sales targets for the years 2010 and 2011 as they are developed. Actual filings outlining the achievement of those targets shall be filed within 180 days of the end of the fiscal years 2010 and 2011.

### (iii) Other Utility Income

[82] The projections for the test years did not include any amount for other utility income. As explained by the Company:

(Smith) ... sales inventory is not something traditionally that we're in the business of. That was more one-offs of -- we had some old Sempra inventory that we disposed it...

So, the only one that would have any kind of direct relationship, if you will, to the customer base and somewhat model-driven would be the interest and late payment fees, but we don't have ---

- Q. And I presume other delivery charges under the service rules?
- A. (Smith) Yes.
- Q. Yeah.
- A. (Smith) But it's -- we are not sophisticated enough to be able to budget specifically on that.

[Transcript, December 1, 2008, p. 123]

### **Findings**

[83] The Board accepts the omission of other income from the test year projections as being immaterial. The Board orders that any amount of actual Other Utility Income from regulated activities earned by the Company be used to reduce the RDA balance.

## c) Revenue Deficiency Account

[84] The RDA was approved by the Board in the Franchise Decision. In GTA-06 the expectation was that there would be no further amounts added to the RDA after the year 2011, and that the RDA would be eliminated by 2019. As explained in this hearing, the RDA was:

(Ritcey) ... set up as a mechanism recognizing that a natural gas distribution company had to establish itself, incur significant capital, not for the handful of customers that we had starting in 2003 but for the multitude of customers that we will have over a period of time.

[Transcript, December 1, 2008, p. 49]

[85] Questions were raised with Heritage as to whether the existence of the RDA reduces the risk to shareholders, in effect providing a guarantee to shareholders that the revenue requirement will be realized. In response, Heritage stated:

(Smith) ... the Revenue Deficiency Account, it is not a guarantee, and I think that's what — it allows the opportunity for the company to, over time, recover the return that they are not achieving in the early stages of the development period.

[Transcript, December 1, 2008, p. 50]

[86] In response to the question as to whether the RDA removed risk to Heritage (the risk of non-recovery), the following was stated by Ms. McShane:

The same risk factors are those that could lead to non recovery. That is that the market simply doesn't develop well enough to recover those, the amounts that are in that account or that the market changes. Oil prices change. Competitive rates -- rates of competitive fuels are such that you can't raise the price of natural gas to a point where you can recover these costs in the long run.

Transcript, December 2, 2008, p. 4971

[87] Heritage, in determining the revenue requirement, took into consideration the ability of the Company to meet the RDA cross-over date of 2011 and the elimination date of 2019:

(Smith) ...The one reason why the rate increases were established the way they were, was to accomplish those two objectives, and why there was a big bump at the front end was to get us back on side with 2011.

[Transcript, December 1, 2008, p. 207]

[88] The achievement of these dates is also important to reduce any intergenerational inequities. As stated by Mr. Ritcey:

(Ritcey) That was the original intent. Again, I refer to it as trying to find balance to customers of today and customers of tomorrow.

[Transcript, December 1, 2008, p. 208]

[89] Undertaking No. 2, which reflected the effect on the projected financial statements if certain revenues were reduced, was submitted in time for the second day of the hearing. This Undertaking considered the following two scenarios: 10% fewer projected customers in Rate Class 1 in all three test years and no additional Rate Class 3 customers added in the three year test period. The results of the scenarios were summarized by the Company as follows:

The crossover period under both scenarios is delayed by approximately one year from 2011 to 2012, and secondly, the overall recovery of the RDA is delayed because, under the current — the model that's been filed with the Board, the RDA has a balance of about 4.5 million at the end of 2018, and under scenario or part (a) of the undertaking with the 10 percent reduction in customers in rate class 1, the residual balance at the end of 2018 is roughly 20 million dollars (\$20 million). And in part (b), the residual balance in the RDA at the end of 2018 is almost eighteen million dollars (\$18 million).

[Transcript, December 2, 2008, p. 479]

## [90] ECI's view of the RDA, and its elimination, is summarized as follows:

- A. (Sandison) That's a good question. I think we were looking more at the fact that in the early years they've got to succeed with their tactical sales plan and growth strategy and attach customers to ensure that that period isn't extended.
- A. (Ryall) If I could also add, one of the reasons for not extending the RDA too far into the future is to reduce some of the inter-generational risk, where you have, you know, the customers that joined the system early, having them contribute too much to the system build out to the benefit of other customers.

[Transcript, December 2, 2008, pp. 568-569]

## [91] The Company's post-hearing submission commented as follows:

... By 2019, the RDA will have been in existence for 15 years. By that time, it is quite probable that a number of Heritage's initial customers will have left having enjoyed the benefit of less than full cost recovery rates, while those who joined the system closer to 2019 will have paid rates which are higher than their cost of service. Any extension of the recovery period for the RDA beyond 2019 will increase the magnitude of inter-generational inequity.

[Heritage Post-Hearing Submission, p. 11]

[92] The Consumer Advocate, in his post-hearing submission, stated:

The Consumer Advocate requests the Board to set 2011 as a mandatory crossover date and disallow any additions to the RDA from that point forward.

[Consumer Advocate Post-Hearing Submission, p. 4]

[93] NS-COHA, in its post-hearing submission, stated:

However, it is recommended that the Board firmly establish the 2019 date for the wrap-up of the RDA. This will ensure that inter-generational inequities are not an issue and that Heritage and its Shareholders cannot simply keep downloading the burden of their less that [sic] effective business planning onto its customers.

[NS-COHA Post-Hearing Submission, p. 8]

[94] The Company, in its post-hearing rebuttal submission, responded to the positions taken by the CA and NS-COHA as follows:

It would be inappropriate for the Board to deny Heritage the opportunity to recover its costs through the RDA by mandating an "artificial" crossover of 2011 or "capping" contributors to the RDA. If a "firmly established date of 2019" is set for the RDA in this proceeding, it may require rate increases in the period 2012 to 2019 of such a magnitude as to make Heritage uncompetitive. Heritage therefore submits that it is inappropriate to set 2019 as the end date beyond which recovery of the RDA would not be permitted. In this regard, Heritage notes that no artificial constraint on the crossover or recovery period dates were imposed on either TGVI or EGNB. Heritage does, however, agree that a review of the status of the RDA at the time of next GTA would be appropriate.

[Heritage Rebuttal Submission, p. 5]

### **Findings**

[95] The Board shares the concerns of the intervenors as to whether the crossover date of 2011 and the elimination date of 2019 will be met by Heritage. Success in meeting these dates will be largely dependent on the Company achieving its revenue projections. Heritage has stated that for its shareholders it is important that these critical

dates are met and it has made a conscientious effort in the Application to ensure this happens. The Board observes that the achievement of these dates is also important to ratepayers and accepts the evidence of the Company and sees no reason, at this time, to change the proposed cross-over and elimination dates.

[96] The availability of the RDA reduces the risk to shareholders of recovering the revenue requirement. It is to the benefit of ratepayers that the RDA be eliminated as soon as reasonably possible.

To help provide some assurance that the cross-over and elimination dates are met, the Board has decided to suspend depreciation charges for the three year test period. This, together with the strategic planning that is being undertaken by Heritage to achieve its revenue projections, should help to ensure that these dates are met. Accordingly, at this time, the Board does not see any reason to conclude, as requested by some intervenors, that any remaining balance of the RDA after 2019 should automatically be absorbed by the shareholders.

#### IV RATE BASE AND INFRASTRUCTURE EXPANSION

#### a) Rate Base

[98] Heritage's rate base includes net plant in service and working capital. The net plant in service is the undepreciated value of the plant which is used and useful in providing service to customers. The Company's working capital includes cash working capital, inventory of supplies, prepaid expenses, deferred charges and the RDA.

[99] Heritage is proposing to spend \$12.4 million in 2009, \$6.9 million in 2010 and \$3.8 million in 2011 to expand its distribution system. Overall, the net plant in service is proposed to increase from \$86.3 million in 2008 to \$111 million in 2011.

[100] In its Application, Heritage explained how it calculates its net plant in service:

Net plant-in-service, as calculated for the forecast period, is the average of the twelve month end balances for the calendar year 2009 and the average of the beginning and end of year balances for the subsequent years. The forecast for 2009 was prepared on a monthly basis whereas the subsequent years forecasts were prepared on an annual basis. Net plant-in-service is the gross value of plant-in-service (including work-in-progress and allowance for funds used during construction) less accumulated depreciation/amortization and contributions in aid of construction.

[Exhibit HG-1, p. 4-1]

[101] Heritage received an interest free loan from the Province in 2005 to build certain portions of its distribution system. The effect of this loan on the rate base is as follows:

In 2005, the company received a loan from the Province of Nova Scotia of which \$5.6 million remains outstanding. On or before July 1, 2011, the company must elect to either repay the loan in one lump sum payment on July 31, 2014, or in five equal annual instalments beginning on July 31, 2012. The company assumes it will elect the latter repayment option. According to the terms of the loan, the unpaid balance of the loan must be netted against the plant-in-service balance.

[Exhibit HG-1, p. 4-1]

[102] Heritage outlined its current distribution system and its plans for expansion during the proposed three year test period. Heritage currently has four market areas - Dartmouth, Amherst, Halifax International Airport and Halifax.

[103] The Dartmouth system, by the end of 2008, is forecast to include approximately 4.6 km of elevated pressure steel pipe, 110 km of polyethylene (PE) steel pipeline mains, a District Regulator Station and a Town Border Station. The main service

areas in Dartmouth include Crichton Park, Burnside Industrial Park, Woodside Industrial Park, Dartmouth Crossing, Russell Lake, Portland Estates, Portland Hills and the downtown area.

[104] The Company expanded into the Amherst market in 2005 and is expected to have approximately 2.1 km of elevated pressure pipeline mains, 34 km of PE pipeline mains, a Town Border Station and a District Regulator Station by the end of 2008.

[105] In 2006, Heritage constructed a Tap Station on the M&NP line and a Town Border Station to service the Halifax International Airport market. The Company expects to have approximately 5.3 km of PE distribution mains by the end of 2008.

The Company's major expansion was in 2007 when it extended its distribution system to peninsula Halifax from Dartmouth via a tunnel under Halifax Harbour and an elevated pressure steel pipeline construction on both sides of the Harbour. Heritage is proposing to complete a dedicated M&NP Tap Station, High Pressure Reduction Station, Town Border Station, District Regulator Station, 7.2 km of elevated pressure pipeline and 20 km of PE pipeline mains to service peninsula Halifax by the end of 2008. Some of this infrastructure is to be used for expansion to Fairview, Clayton Park and Bayers Lake Industrial Park in Halifax.

[107] ECI, in its pre-filed evidence, raised concerns with respect to the gas distribution expansion plans proposed by Heritage:

Heritage has forecasted that 40% of its Rate Class 2 and 25% of its Rate Class 1 growth will come from expansion to Clayton Park, Fairview, and Bayers Lake. However, according to ECI-IR-13 it has not completed feasibility tests confirming that these projects are viable. Heritage has stated that they have secured the majority of the Rate Class 1 and 2 customers in these areas, but this may not indicate that these projects meet the acceptance criteria of

the feasibility tests. Heritage has not clearly communicated whether these extensions would meet the acceptance criteria. Heritage should demonstrate to the Board that these expansion projects are justified and feasible. They should do this by filing data that support the project feasibility.

[Exhibit HG-10(a), p. 8]

[108] ECI also questioned the usefulness of the orphan systems which have not

been integrated within the Company's distribution system:

In response to ECI-IR-14h, Heritage has stated that several of the orphan systems have not been integrated into its distribution system to date and that HRM has not made any contribution to these systems. It is therefore questionable whether these orphan systems are used and useful at this time. The Board should seek clarification on the orphan systems and HRM paving projects to determine whether they are included in Rate Base or Construction Work In Progress.

[Exhibit HG-10(a), p. 8]

[109] Heritage responded to ECI's concerns about the orphan systems in its pre-

#### filed rebuttal evidence:

From time to time, the Halifax Regional Municipality (HRM), will construct an orphan system, defined as a pipeline network that is not attached to the Heritage Gas network, on a street that is being rebuilt (or resurfaced) in relative close proximity to other Heritage Gas pipeline mains. It is understood that at some point in time in the future, Heritage Gas will purchase the assets from the HRM.

Of the 8 orphan systems that were listed in the response to ECI-IR-14h, four (Dawson Street, Elliott Street, Wellington Street and Hollis Street) will have been integrated and activated into the Heritage Gas network by the end of 2008. Heritage Gas will also have purchased the orphan systems from the HRM and the assets will be included in rate base. These orphan systems are active and are servicing customers and therefore are used and useful.

Three other orphan systems (Cranston Avenue, Regent Drive and Spring Avenue) will remain inactive at the end of 2008. Heritage Gas will not have purchased these orphan systems from the HRM and these assets will not be in rate base or construction work in progress. The HRM built and paid for these systems and Heritage Gas expects that it will purchase these assets at some point in time in the future and will, at that time, integrate into its network.

One orphan system (Chestnut Lane) has been purchased from the HRM and remains inactive. The total cost of these assets was \$18,000. The assets, consist of conduits installed at strategic locations such that in the future a main could be constructed without having to cut the street and, remain in construction work-in-progress.

From time to time, Heritage Gas and the HRM will cooperate to install pipeline mains on streets, contiguous to the Heritage Gas system, which are being repaved or resurfaced. In

each of these situations, Heritage Gas will pay for the installations at the time of construction. In each of these situations, customers will have been recruited to justify the expansion and the assets are activated upon completion. The assets are therefore immediately included in rate base. All of the paving projects listed in response to ECI-IR-14h are included in rate base and are used and useful.

[Exhibit HG-12, pp. 2-3]

[110] The Company, in its pre-filed rebuttal evidence, elaborated further on its expansion plans:

Heritage Gas has performed a detailed market study of the potential expansion to Fairview, Clayton Park and Bayers Lake. It has determined that to serve all of these areas, it will involve the construction of approximately 20 kilometers of pipeline mains (depending on routing) and require a capital investment of approximately \$10 million (to be made over 3-4 years). The company has secured customer commitments of approximately \$900,000 which would produce a profitability ratio of approximately 0.9:1, which is below the threshold required for advancement. Once the company factors in the customers who have a high probability of commitment, the revenue commitments increase to \$1.3 million, which would produce a profitability ratio of 1.13:1, which exceeds the threshold required for advancement. The company continues its sales and marketing activities in the area and is on schedule to present the project to its Shareholders and Board of Directors for approval early in 2009. This project approval process and timelines are consistent with all Heritage Gas capital projects.

[Exhibit HG-12, p. 3]

[111] Heritage calculates its cash working capital requirements based on one-twelfth of its annual operating expenses. The Board, in its 2006 Rate Decision, directed Heritage to carry out a lead/lag study to calculate its cash working capital. In its Application, the Company stated:

Heritage Gas contemplated the merits of performing a lead/lag study in conjunction with this Application. The company is in its fifth year of operations and has an increasing level of customers who have been activated for greater than one year and thus have an identifiable pattern of activity to evaluate. However, this group of customers has not yet reached one thousand in total. This fact coupled with the estimated length of time required to complete a study (3-4 months), the anticipated cost (\$60-\$90,000) and the fact that the results would not necessarily be based on an appropriate set of assumptions, has led Heritage Gas to conclude that 2008 is not the time to conduct a lead/lag study.

Heritage Gas will maintain its commitment to complete a study in 2011 as part of an application for 2012 and forward rates. It is estimated that, at that time, the company will have had an appropriate historical base on which to evaluate revenue and expense patterns over an indicative customer base. It is expected that, at the end of 2010, Heritage Gas will have approximately 4,800 customers activated and over 4,000 of those would have been activated for greater than one year.

In addition, the current forecast which forms the basis of this Application indicates that Heritage Gas will be cash flow positive in 2011 meaning that all working capital and capital requirements will be funded from operations versus regular shareholder contributions. Heritage Gas will, therefore, be in a better position to draw conclusions as to the various assumptions required in a lead/lag study.

[Exhibit HG-1, pp. 2-3]

[112] ECI agreed with the Company's conclusion that conducting a lead/lag study at this time will not materially change the revenue requirements or proposed rate increases:

Contrary to the Board's previous direction, Heritage has not completed a Lead/Lag Study for this Application. A Lead/Lag Study would more accurately determine working capital requirements. Instead, Heritage has continued to assume that cash working capital is one twelfth of its annual operating expenses. Using a simple approximation such as this will not materially affect Heritage's revenue requirement nor its proposed rate increase in this test period. Heritage has stated in ECI-IR-16a that doubling its cash working capital allowance would only increase rates by 0.14%, all else remaining equal.

Heritage has also stated that now is not the appropriate time to conduct a Lead/Lag Study because of the cost, because it does not have a sufficient number of customers with identifiable consumption and payment patterns, because the time span to complete a study is too long, and the assumptions may not be appropriate. ECI agrees with Heritage that the Lead/Lag Study would not add significant incremental value to this application, and that it would be appropriate to complete the study for the next General Tariff Application.

[Exhibit HG-10(a), p. 7]

- [113] Heritage described in its Application how it calculates inventory, prepaid expenses, deferred charges and the RDA as part of the working capital.
- [114] The working capital related to the RDA is calculated based on the monthly average balance of the RDA for the 2009 test year. For the remaining two test years, the working capital is calculated based on the annual average balance of the RDA.
- [115] The Company's total working capital is estimated to be \$33.5 million in 2009, \$36.4 million in 2010 and \$35.5 million in 2011.

[116] The Board received a written submission from Killam Properties Inc. ("Killam") objecting to what it described as imprudent investment decisions by Heritage, especially in the Amherst market. Killam stated:

Evidence presented in the 2008 Rate Application state that the Company's investment in Amherst have not meet the original expectations.

- Heritage Gas has installed 26% more PE pipeline than was originally anticipated.
- Heritage's distribution margin is at 57% of the original amount expected in its 2004 assumption.
- The long-term number of Class 2 and Class 3 customers projected has decreased to 10 from the original amount of 17, a 41% decrease.

Heritage does not disclose the current financial return, or the expected financial return, in Amherst. Based on the shortfalls experienced to date, and the significant decrease in identifiable larger customers, we question Heritage's investment decision to expand into Amherst.

The rate application states that two markets that Heritage had expected to expand into, Truro and New Glasgow, do not currently have favourable economic expansion scenarios. Both these markets are a similar size to Amherst, which leads us to further question the return on investment in that market.

Based on the information provided, we conclude that the revenue deficiency account is overly inflated due to losses relating to the Amherst expansion. As a component of rate base, a higher than reasonable revenue deficiency account leads to a higher cost of capital, and higher rates for all customers.

We feel that if current financial results and forecasts show that the Amherst business model is resulting in, and will continue to result in, an increase to the revenue deficiency account, that the decision by management to expand into that market was imprudent. Any losses associated with this investment decision should be absorbed by the shareholders, not by the customers.

[Exhibit HG-22(a)]

# [117] Heritage provided the following response to Killam's submission:

Killam Properties Inc. claims that the expansion into Amherst was imprudent. Heritage Gas disagrees with this assertion.

In its 2003 Franchise Application, Heritage Gas articulated its proposed methodology for evaluating capital projects. The Community Feasibility Test would be utilized for expanding into a new market, such as Amherst. The CFT would consider the total amount of capital required to expand into a market and the total revenue that would be expected to be realized.

The Board endorsed the proposed methodology in its Decision in the 2004 General Tariff Application.

Prior to proceeding to expand to Amherst, Heritage Gas recruited the threshold amount of initial revenue required to support the capital investment. The project was then presented to the Shareholders for approval utilizing the established economic feasibility test. Due to the fact that the company had secured the initial required revenue threshold, the Shareholders approved the project. It was a prudent decision at the time and the assets are currently used and useful.

Heritage Gas would agree that while the initial expansion into Amherst was successful, the market has not generated the expected growth that was assumed in 2005. However, the decision making process that was utilized in 2005 was prudent.

[Exhibit HG-16, p.1]

#### **Findings**

[118] The Board has considered the evidence filed in the Application and approves the proposed rate base, as amended for the suspension of depreciation charges, and the method of calculating rate base over the three year test period.

[119] The Board is also satisfied that a lead/lag study for this Application would not have made a material difference in the calculations of rates. The Board, however, orders that a lead/lag study be prepared for the next rate hearing.

[120] Killam alleged imprudent investment practices by Heritage, using the Amherst market expansion as an example. It is Killam's opinion that Heritage did not conduct proper due diligence on the expansion before undertaking installations in Amherst, based on the current and projected revenue shortfalls during the three test years. Killam also compared the Amherst market with that of Truro and New Glasgow markets, which Heritage presently believes to be unfavourable for expansion, based on the current economic scenarios prepared for these markets. According to Killam, the expansion into the Amherst market resulted in an inflated RDA, which leads to higher capital costs and higher customer rates.

Heritage disagreed with Killam's claim and provided details and analysis on how the expansion into the Amherst market was undertaken. Heritage stated that as part of its franchise application, a community feasibility test was proposed to be done before expanding into new markets, such as Amherst. The methodologies for the feasibility tests were approved by the Board in its 2004 Rate Decision.

[122] As part of the community feasibility test, Heritage recruited initial threshold revenues to support its capital investment, which was approved by its shareholders. Heritage, however, admitted in its evidence that the Amherst market has not achieved the growth initially expected, but it asserts the decision making process was prudent.

[123] The Board is satisfied that the expansion into the Amherst market was a prudent decision at that time.

# b) Community and Mains Feasibility Tests

[124] ECI and Killam have raised concerns regarding the feasibility tests currently utilized by Heritage as part of its infrastructure expansion protocol. ECI was specifically concerned that Heritage had not demonstrated in any of its evidence that the proposed expansions to Fairview, Clayton Park and Bayers Lake had passed the mains feasibility test.

The Board currently approves infrastructure expansion by Heritage to new areas under the *Pipeline Act* based on its safety related jurisdiction. Accordingly, the Board does not review and approve the related feasibility tests. The Board has assumed

in the past that Heritage is using the approved feasibility tests when expanding its infrastructure. As noted by the Company, the Board approved the methodology for the mains feasibility test in its 2004 Rate Decision to ensure that expansion of the infrastructure has a net present value profitability ratio of one or greater over 25 years and a profitability ratio of one or greater at year seven.

[126] ECI, in its pre-filed evidence, raised concerns with respect to the mains feasibility test for expansion into the Fairview, Clayton Park and Bayers Lake areas of Halifax and recommended that Heritage should justify such expansions to the Board.

#### **Findings**

[127] The Board is concerned that if the feasibility tests are not conducted properly, it will negatively impact ratepayers by increasing the RDA.

[128] The Board agrees with ECI's recommendation. Heritage is directed to provide details of the mains feasibility test along with its applications for permits to construct when it expands into the areas of Fairview, Clayton Park and Bayers Lake.

[129] The Board further directs Heritage to continue to prepare community and mains feasibility test calculations for all new areas and all extension of its mains. The Board requires Heritage to include this information with its permit to construct applications.

#### V RATE DESIGN

### a) Cost of Service Study

[130] Heritage prepared GTA-08 based on the following objectives:

- 1. Operate a safe and reliable natural gas distribution system.
- 2. Achieve revenue growth.
- Manage its costs effectively.
- 4. Achieve complete recovery of the Revenue Deficiency Account (RDA) by 2019.

[Exhibit HG-1, p. 16-2]

[131] To achieve these objectives, the Company updated its business model based on historical results, on current customer commitments and on prospects for growth, while considering the following guidelines to calculate the proposed rates:

- 1. Achieve a cross over point of the revenue deficiency account (RDA) no later than 2011.
- 2. Achieve a complete recovery of the RDA no later than 2019.
- Avoid rate shock on overall customer bill (including commodity charges).

[Exhibit HG-1, p. 16-2]

[132] Chymko then used this updated business model to prepare a Cost of Service Study ("COSS") using the following principles:

- a) Focus on increasing the portion of revenue from customers on the already installed infrastructure.
- b) The rate adjustment should be fair between all three rate classes and have a revenue to cost ratio ("R/C") of 1:1 by the end of the three year test period.
- c) The rate adjustment should be fair within each rate class, i.e., that the fixed charge and variable charge be set as close as possible to the cost to provide service to customers in each rate class.
- d) The recommended rate adjustment is not to introduce elements of rate shock, which Heritage defines as a rate increase of more than 20% per year.

[133] The COSS recommended rate adjustments, which Heritage adopted in its Application:

Using the results of the cost allocation study as a guide, Chymko Consulting is recommending distribution rates based on the principles of rate class cost causation, tariff charge cost causation, rate shock, stability, predictability, and fairness. Table B below provides a summary of Chymko Consulting's recommended rates side-by-side with the rate assumptions built into the HGL business plan.

. . .

Rate 1 requires the largest increases to achieve a 100% revenue to cost ratio by 2011 because allocated costs are growing faster (due to RDA reduction efforts) than new customers are added to the system. HGL's business plan applies tariff increases to Rate 2 in 2010 and 2011 that have the effect of maintaining a revenue to cost ratio in the 110% range. Chymko Consulting is recommending a similar 2009 increase to ensure that revenues at least recover cost (with no increase in 2009, Rate 2's revenue to cost ratio is approximately 90%). Furthermore, the Rate 2 increase is in part alleviating the need to apply a larger increase to the Rate 3 tariff, which would only need to be reversed in the next year. This initial increase also ensures that Rate 2 as a whole will require no further increase in future years. No further increases or reductions will mean that revenue to cost ratios decline to 100% as contributions to the RDA decline and customers are gradually exposed to the full cost of service. Forecasted customer growth in Rate 3 is substantial and the additional revenues from this growth are sufficient to ensure that the revenue to cost ratio will be 100% by 2011.

Given that the cost of service study reports higher site-related costs than what the current fixed monthly charges would support, Chymko Consulting is also recommending that proportionally more revenues be collected through a higher fixed monthly charge for all rate classes. This will also impact customers within each rate class, so Chymko Consulting also undertook to examine the impact of its recommended rates on a number of representative consumers. HGL's business plan proposes that the largest overall rate increases occur in 2009, and the impact on individual customers is shown in Table C.

[Exhibit HG-1, pp. 16-8 - 16-9]

[134] The rate increases proposed in the Application were amended slightly as per Exhibit HG-2 filed by the Company on September 16, 2008. These amended rates were contained in the Notice of Public Hearing published in advance of this hearing (see paragraph 164).

[135] The Board understands that the increases proposed to the fixed charges for each customer rate class are to cover their respective portion of the Company's fixed costs. In the same vein, the variable rates for each customer class are intended to recover their respective portion of the Company's variable costs.

[136] The Company is not proposing any increases to variable rates for Rate Class 2 and Rate Class 3 customers for the test years 2010 and 2011.

[137] The CA questioned Heritage on the process used in determining the rate adjustment for each customer class:

A. (Smith) Mr. Mahody, when we were before the Board in 2006, we produced a business plan that achieved No. 1 and No. 2 of those objectives. And as we were doing our — updating our business plan, we realized that under the current structure or the current financial modelling, the assumptions within the rate design, those two objectives could not have been achieved.

So we then went about doing our scenario planning to determine at a minimum what would it take from a revenue increase perspective or rate increase perspective to bring those two objectives back on stream.

Then we -- so we achieved that through the update and the financial modelling aspects, and then we then did an overall analysis of the -- once you rule on the effect of the commodity, then try to assess those increases against a total customer bill year over year.

After that point, we then engaged Chymko to help us with a rate design aspect or get into the cost-of-service analysis and the rate design components. And also, one of our objectives as we get into later on within Section 16 of the application was then trying to get into the balance between rate classes, balances within rate classes, and things of that nature, and Chymko assisted us in that process.

[Transcript, December 1, 2008, pp. 29-30]

[138] Another issue which arose during the hearing related to the classification of distribution mains. The COSS study classified distribution mains as one third Demand and two thirds Customer (Site). Mr. Whalen, a consultant for Board Counsel, has concerns with this approach and stated in his pre-filed evidence:

Yes. One of the most critical assumptions underlying these results is the classification of Mains as one third Demand and two thirds Customer (Site). Chymko provides its rationale for its assumption on page 16-17 of Heritage's evidence. That discussion refers to three methods which can be used to estimate the relative importance of each factor, and Chymko notes that these methods are "intended for established utilities whose infrastructure is relatively constant from year to year." In response to Heritage (Multeese) IR-10, Chymko notes that while comparisons of classification assumptions across utilities is difficult, the "one third demand" assumption used by Heritage is lower than the range Chymko has observed elsewhere.

To test the sensitivity of the cost of service to this assumption, I recalculated results assuming that Mains is classified as 50% Demand (rather than one third Demand) and 50% Customer (Site). The results are shown below:

Year	Rate 1	Rate 2	Rate 3
2009	107	100	71
2010	108	97	74
2011	105	92	89

As these results show, the effect of this change is to decrease Rate 1 costs and increase costs for Rates 2 and 3. This is significant, because as discussed below, one of Heritage's objectives in this Application is that all rate classes have an R/C = 1 by 2011 and the rates proposed are designed to meet that objective. Obviously, the rates proposed would be different if the cost of service classified Mains as 50% Demand and 50% Customer (Site).

[Exhibit HG-11, pp. 3-4]

[139] Mr. Whalen suggested that a study be conducted to determine what other utilities are doing with respect to the classification of distribution mains, with a report to the Board within six months:

I would recommend that Heritage conduct a study of the method used by other gas utilities to classify Mains, and submit a report to the Board within six months. The response to Heritage (Multeese) IR-10 lists three factors which influence this classification. Each of these, and maybe others, should be considered in the study. If the report supports revising the classification of Mains, it should also include an estimate of the effects of doing so on the R/C within each rate class for 2009 - 2011, together with recommendations of any actions to be taken to address those results.

[Exhibit HG-11, p. 4]

[140] Board Counsel reviewed this issue with witnesses for Chymko during the hearing to seek clarification on the possible scope of such a study:

Q. When you were responding to his question in (B), you say this:

"In the cost-of-service studies of other gas utilities, Chymko Consulting has observed the demand component of mains to vary between 35 percent and 60 percent."

And you've put in brackets:

"(Relative to Heritage Gas's 33.3 percent.)"

With respect to the cost-of-service studies of other gas utilities, I'm just wondering what sort of a sample of companies -- utilities are we looking at? Can you tell me? How many?

- A. (Turner) That range was probably from about a half dozen different utilities over a period of maybe 10 years. It's just the ones that we were involved with and admitted generally established utilities, not a utility in the same situation as Heritage Gas.
- Q. And they're -- that's:

"The physical system characteristics, data characteristics, and classification method."

Are you aware of any studies which have been done, for example, to determine how these three factors contribute to the appropriate split between demand and site? For example, data characteristics, have any studies been done to show why that is a relevant factor, or how it contributes to the split?

A. I can give some examples. There's not really -- there's not studies, but the intent of that was to consider situations that we've run into, in the past, where, for an example, the data that we get on what is mains in the first place is based on a capital asset record that makes a little shortcut assumption that just assumes that the last X-meters of the pipeline is a service, and everything else is the mains, and it may or may not be accurate, because that assumption was made when the system was set up.

And so it may inadvertently pull extra costs into mains, or not enough costs into mains. There's not a very — there's — it — that can make a difference Differences on how labour is capitalized — labour — if you were to introduce cost into this kind of study, a lot of times, you know, you need the same labour out there, regardless if it's a large-diameter pipe, or a small-diameter pipe, and if a lot of labour is capitalized to that project, then it might increase the customer component.

Also, there might be differences between utilities and how they log repairs and maintenance to the system, whether or not they even register changes -- when they have the trench open, and they make changes to the system, whether or not they actually go back to the capital asset record and make that change, or they just end up doing it on the GIS system, which doesn't have any cost data, that can get some skewing, as well.

So those are the kind of examples that it was really meant to illustrate that point.

[Transcript, December 2, 2008, pp. 324-328]

[141] The Board questioned Mr. Whalen about the treatment of RDA as an asset in the COSS:

I see it's been done in the cost-of-service study based on assets and such as a return on rate base item. Are you satisfied that that's an appropriate way, or would there be another way you could think of that might better reflect how this RDA was created?

A. No, I'm satisfied with that. I look at it essentially as being deferred return. I looked at the years to see whether there was any year where the RDA was more than the return. I don't believe that's the case, I believe it's always less than the return.

So, I feel okay about treating it as return when it's going into the RDA and treating it as return when it comes back out.

[Transcript, December 2, 2008, p. 592]

### **Findings**

The COSS in this proceeding was prepared using the same general assumptions which were used by the Company in the last rate application. The only concern about the current COSS relates to the classification of distribution mains between Demand and Customer (Site). The Board approves the COSS methodology, except as noted below.

The Company used the assumption from the last rate study to classify one third of the distribution mains as Demand and two thirds as Customer (Site). The reason given by Heritage to support this assumption is that the infrastructure has not materially changed between the last rate application and the current Application. Accordingly, in Heritage's view, there is no basis to consider any deviation from the previously approved classification split.

[144] Mr. Whalen agrees with the classification of distribution mains for the current rate study. However, he recommends that the classification should be studied by the Company over the next six months and a report provided to the Board. Based on the results of this study, the Board would then decide whether or not classification ratios should be changed and rates adjusted for the remaining two test years.

[145] Chymko has expressed concern with the six month time period suggested by Mr. Whalen to carry out this study. It is their opinion that the appropriate time for the study is about 18 to 24 months from now and that the results of the study should be used for the next rate application, expected to be in 2011.

[146] The Board agrees that an infrastructure study is needed and that the information derived from the study is more appropriate for the next rate application anticipated for 2011. Such a study needs to be done properly and requires reasonable time for its completion and review by the Board.

The Board agrees with Chymko with respect to the timeline for such a study and orders that Heritage carry out a study and report to the Board as to how other utilities classify their distribution mains between Demand and Customer (Site). The study is to be submitted to the Board before the next rate application or, in any event, no later than December 31, 2010.

#### b) Revenue to Cost Ratios

[148] John Reynolds of Quetta questioned Chymko witnesses on their recommendation that R/C ratios for each customer class should be 1:1 at the end of the three year test period:

Q. Without any questioning of the qualifications of the witness as an expert, I would like to have Mr. Chymko expand a little bit on his observations of his targeting a one-to-one cost revenue ratio.

And the rationale for my question is that when I first started in this exercise, I learned that because cost allocations were, in effect, exercises in cost accounting and subject not to error but subject to judgement, that we ought to be satisfied with a band width of either -- of 90 to 110 or 95 to 105. And I've come -- here in this hearing room, a great deal of attention is paid to that issue. And some people suggest that if you're at 95, you're paying under the odds. If you're paying at 105, you're paying over the odds.

I don't subscribe to that point of view. I consider the band width to be something similar to what we have in -- in confidence limits, and that I'm as happy if it's at 95 as I am when it's at 105.

I'm sorry for the speech, but I'd appreciate if you would comment and respond to that as it applies to this industry, because I don't know anything about cost accounting in your field.

A. (Chymko) Okay. Well, thank you. First of all, when we talk about the revenue, the cost ratio of one to one, what we're doing is we're talking about a target and we're talking about a target for a rate class so that we do not have cross-subsidization between various rate classes. Within a specific rate class, you are still going to have cross-subsidization or you're going to have some customers at one level of revenue to cost ratio, you're going to have other customers at another level of cost of service, but the goal is to at least try and get the rate class targeted towards the one to one.

Now, when it comes to rate design, there are many factors that go into the rate design. The cost of service is just one. It's a guide. I agree with you, it's a guide going into rate design, and you have to start to look at other rate design criteria in regard to is it stable, what's the stability of it, is it predictable, ease of administration from the utility point of view, ease of understanding from the customer point of view. Just the whole issue of can you even get to a one-to-one relationship depending where you are in a point of time for the avoidance of rate shock, or what's the tolerance for rate shock.

And what we're seeing more and more from regulators is when it comes to the separation of the pipes or electricity, the wires, in deregulated markets where the commodity is deregulated, the regulators are pushing more and more to have a targeted one-to-one relationship, so there's no mixing, because the utility is not involved any longer on the regulated side when it comes to the supply of the commodity.

So there is an emphasis more and more to get to, as I say, the target of one to one. At the end of the day, where you land — is it 95 to 105 — is it, you know, 90 to 100 — part of that will depend on how often do you make your rate adjustments, a number of items like that.

[Transcript, December 2, 2008, pp. 319-322]

[149] In its Application, Heritage noted its reasons for the adoption of R/C ratios of 1:1 for all customer classes at the end of the three year test period:

The rate adjustments should be fair and equitable between Heritage Gas' three rate classes and should allow for the ratio of revenue to the cost of providing service to approximate 1: 1. Heritage Gas' objective is to have rates for each class achieve a revenue to cost ratio of 1:1 by the end of the test period. Ratios outside of this range would indicate that cross subsidization was occurring between rate classes. At the present time, with the rates currently in place, and assuming that the company continues to achieve customer growth, the three rate classes are expected to recover between 70% and 90% of their cost throughout the current test period, which is well below the desired goal.

[Exhibit HG-1, p. 16-3]

#### **Findings**

[150] Chymko, in its COSS, has used an R/C ratio of 1:1 as a target for each customer class at the end of the three year test period. The proposed rates are consistent with this target.

[151] The Board has considered the use of a band for R/C ratios between different customer classes, as referred to by Mr. Reynolds in his cross-examination of Heritage.

The Board notes that, for the purpose of the rate design, an R/C ratio of 1:1 is an appropriate target. This ratio allows the actual rates to vary on both sides of the target within a reasonable band. Various jurisdictions have used different bands such as 90% - 110% or 95% - 105%. This Board has established a band of 95% - 105% for Nova Scotia Power Incorporated. Chymko, in its evidence, agreed that similar bands have been used by various utilities in establishing rates for its customers.

[153] The Board agrees with the Company that, for purposes of the present Application, it is appropriate to design rates based on an R/C ratio of 1:1 for each customer class at the end of the three year test period. However, in the next rate application, a band of 95% - 105% should be considered in the determination of rates for all customer classes to avoid potential rate shock and other issues.

#### c) Revision to Rate Class Boundaries

Heritage's Application includes customers in Rate Class 1 which have an annual natural gas consumption of 5,000 gigajoules ("GJ") or less. A typical single family residential home consumes up to 150 GJ of natural gas per year. During the hearing, the Board heard evidence suggesting that residential customers should be treated as a separate customer class, given their number and the amount of their annual consumption.

[155] The Board questioned Chymko about the possibility of creating a separate residential customer rate class:

Q. (Dhillon) I'd like to go back to discuss a little bit more about rate classes as they're defined in the study now, and I know we heard discussion -- you had discussion with Mr. Outhouse, and as I understand it the answer was that based on the consumption levels and the fixed costs and other factors, your opinion was that they are appropriate, I guess, at this time, the rate class 1, 2 at whatever the break.

Just as an example that, at least in Nova Scotia, the Power Corporation had a separate rate class for residential purposes, and the water utilities mostly have rate class residential as separate, normally based on the meter size, not necessarily the single family or — based mostly on the meter size.

So my question is that in this rate class 1, when you go from 1 gigajoules up to about 5000, do they have the same rate -- same infrastructure, meter size and pipe sizes or they could be different? I mean, is that the criteria could be used as another rate classification?

A. (Turner) The basis of our model is based on that assumption, that there are some differences, and they were used in calculating the weighted average cost of meters and services. So we did have some and that was actually provided in a confidential response. That's true.

However, it's also true that a large component of the costs allocated to rate class 1 are recovered under variable charge, and so larger customers within rate 1 would currently pay proportionately more than smaller customers, just because those costs are -- you know, just the nature in which they're recovered.

Intuitively, and this is just a guess, if you were to separate out the residential customers, you would be -- and I should also say that the cost difference really is only in the meters and services, the rest of it is really, you know, proportionately not all that different between residential and the next level up of consumption.

So if you were to separate the residential customers, my guess is that proportionately fewer costs -- proportionately the difference in costs allocated to residential, call it, 1A versus 1B, would not be all that different.

However, you would now need to recover those costs on a higher rate for the rate class 1. My guess is that they might be actually worse off if we were to separate them out into rate class and follow through logically with the cost allocation study, and if we were to design the rates on the policy of targeting in the middle of, you know, a band of 95 to 105 -- you know, targeting the 100 percent revenue to cost ratio, it seems probable that the customers would actually -- the residential customers would actually be worse off.

- A. (Chymko) And part of that evidence, I think, would be looking at the unit costs. So the unit cost for residential on an annual basis for the fixed cost is quite high whereas through the tariff design we're only recovering or suggesting that eighteen dollars (\$18) a month be recovered. So that would be the cross-subsidy issue that Mr. Turner was addressing in regard to customers being the smaller ones being better off within that rate category.
- A. (Turner) Yeah, that was the term I was struggling for. So the unit cost would be quite similar between those two groups in a grand total. They would be different in you know, it could be a fairly material difference for just the meters and services, but there are a number of other costs where they'd be exactly the same. So the costs would be in total, unit costs would be relatively similar between the two groups, but that smaller group consumes a lot fewer Gjs, and to make up that amount or that revenue to match the cost would need a higher rate.
- Q. So it's the volume of gas being used by residential customer versus the other customer which is driving the ---
- A. (Turner) Yeah.
- A. (Chymko) So you try and make some of those adjustments through the rate design component such as how much to charge on the fixed charge or the monthly charge versus the energy charge.

[Transcript, December 2, 2008, pp. 367-370]

[156] The CA also questioned the Company during the hearing on the criteria used to define different rate classes:

- Q. Okay. And as I understand it, according to the rate structures that's reflected here, Heritage's current rate structure, residential users first of all would come generally with your experience, come within what range of us as determined in that second column, sir?
- A. (Chymko) From our experience with looking at load data, very seldom do we go through a rate class and look at the information as to this is residential or this is small commercial. Our understanding though, the usage for general residential could be anywhere up to 100, could be 150 depending on where you are. There could be some large residentials that have got swimming pools with heating needs. All of those types of things that could take you well up into the range. But from our analysis, we did not focus, nor did we I believe have data that identified here's residential and here's other customers. We were just looking at all customers within that rate class.
- Q. Generally though, your view would be that the residential users of this system would be at the lower end of that scale, isn't that correct, sir?
- A. (Chymko) They generally would be at the lower end.
- Q. And at the top end of that rate one class runs to approximately 4999 gigajoule. Do you see that do you?
- A. (Chymko) Yes.
- •••
- A. (Chymko) Now, some, when you get to the break point up at the larger end, again, it's all in the size of customer because there are utilities that range up to in the range of 25,000 GJs that are in rate class one. So you'll get a different type of customer, mainly on size, depending on how you go. But there seems to be, you know, anything up to 8000, 20,000 could be the top end of rate one. So that mix of customers you're getting higher up, would go from your residential, your small commercial, you might even start to get into small industrial, depending on where that rate break is.
- Q. And when the -- when you're trying to determine how rate classes ought to be broken down and designed, what criteria are you using to determine whether or not a particular group should be defined as a specific class?
- A. (Chymko) Generally, when we're looking through, one of the key drivers is cost causation and what are causing the costs. And it's not so much who is using this system as much as it is why are they using this system or how are they using this system. So cost causation would be a good example. Going through and looking at how the system is planned and designed, so how much demand do they use on the system. At what point do they use the system, how many customers will be using the system at that same time. So then going back it's looking at the cost and just to use metering as an example or service lines, is there a difference in cost between serving a small customer or a larger customer, whether it's residential or, whether it's a small commercial. Those would be a number of the drivers that we would be looking at when it comes to cost causation which then drives us back into rate points within rate classes.

[Transcript, December 2, 2008, pp. 297-300]

# [157] Killam, in its letter dated November 26, 2008, questioned the consumption

#### boundary between Rate Class 1 and Rate Class 2:

We do not agree with the current eligibility requirements distinguishing a Rate 1 customer from as Rate 2 customer. The current rate schedule requires that an end-user whose gas requirement at a location is greater than 5,000 GJ, but not more than 50,000 GJ, per year qualifies for Rate 2.

Heritage's rate application states that residential customers on a go forward basis will consume approximately 95 GJ's per year. This means that a commercial or industrial customer needs to consume approximately 52 times more gas on an annual basis than an individual home owner to take advantage of the Medium General Service rate class. The unreasonable hurdle of 5,000 GJ leaves a large group of commercial operations unable to take advantage of their size in benefiting from lower energy costs.

A review of other jurisdictions in Canada highlights that Nova Scotia has one of the highest volume requirements to qualify for the "medium commercial" class. Union Gas in Ontario, for example, has a minimum volume requirement of 1,877 GJ per year to qualify for their Large Volume General Service Rate. Terasen Gas, in British Columbia, uses a similar requirement; customer whose annual consumption exceeds 2,000 GJ qualifying for a more favourable rate class.

We recommend that eligibility to qualify for Rate 2 to be reduced to a more reasonable 1,000 to 1,500 GJs per year; allowing a greater incentive for smaller commercial and industrial users to convert.

[Exhibit HG-22(a)]

# [158] The Company responded to Killam's submission as follows:

Killam Properties also argues that the GJ-based threshold for Rate Class 2 eligibility should be reduced to 1000 to 1500 GJ. Killam Properties suggests that Heritage Gas's Rate Class 2 threshold is "one of the highest" based on a review of "other jurisdictions," citing figures from BC and Ontario. While time does not allow Heritage Gas to conduct a thorough review of all Canadian gas utilities, a quick review of company websites confirms that at least three other utilities use materially higher rate class thresholds. AltaGas Utilities (6,400 GJ), ATCO Gas (8,000 GJ), and SaskEnergy (660,000 m3, which roughly converts to 25,000 GJ) are all noted to use a higher breakpoint for the equivalent of Heritage Gas's Rate Class 2.

The implicit suggestion in Killam Properties' argument is that customers in the 1000 or 1500 GJ to 5,000 GJ group should receive some type of rate reduction. Heritage Gas does not support this suggestion, simply because offering a reduction to this group means that some other group of customers will need to pay more. As discussed above, growth in Rate Class 3 is critical to Heritage Gas's business plan, which means there is no justification to increase rate levels above 2011 cost, as is currently proposed. Rate Class 1 is already proposed to face a near 20% rate increase in 2009 with smaller increases in 2010 and 2011, just to ensure rate levels maintain a 1:1 revenue to cost ratio.

Killam Properties' recommendations have the effect of fundamentally altering these policy objectives with no supporting evidence or rationale as to why a 1000 or 1500 GJ threshold for Rate Class 2 is any more appropriate than 900 GJ, 1600 GJ, or the existing 5,000 GJ. The reality is that the issue of where to draw the line between rate classes is a concern for all utilities, or any company with generalized posted rate schedules. The only means to fully eliminate this issue is to develop a customized rate for each individual customer on the system. Other rate design issues, such as simplicity and transparency, make this solution impractical.

[Exhibit HG-16, pp. 3-4]

### **Findings**

[159] The Board has considered the evidence presented at the hearing respecting the boundaries of different customer rate classes. The proposed rate classes are approved.

[160] The CA is of the view that the residential class should be considered a separate rate class, given the modest annual natural gas consumption of up to 150 GJ per year by these customers.

[161] Killam argued that the boundary between Rate Class 1 and Rate Class 2 should be lowered from the current boundary of 5,000 GJ per year.

[162] The Board does not have sufficient evidence to make a decision on this issue. A COSS based on a different set of customer rate class boundaries needs to be completed to determine the effects on all customers in different customer rate classes.

The Board directs that Heritage consider the following two alternatives as part of its next rate application: 1) residential customers consuming up to 150 GJ per year as a separate rate class; and 2) a possible change in the consumption boundary between Rate Class 1 and Rate Class 2.

#### VI PROPOSED RATE INCREASES

[164] In its amended Application, Heritage requested the following rate increases in respect of the charge for distribution service for Rate Classes 1, 2 and 3, to be effective on January 1, 2009, 2010, and 2011:

Tariff Charge	Rate 1	Rate 2	Rate 3
Fixed (\$ per month) Current 2009 2010 2011	13.13	262.66	630.38
	18.00	352.09	1,126.48
	18.00	481.56	1,729.32
	18.00	526.99	1,868.49
Variable (\$ per GJ) Current 2009 2010 2011	5.056	1.867	0.037
	5.981	2.201	0.149
	6.497	2.067	0.115
	6.969	2.019	0.107
Demand (\$ per month per daily GJ demand) Current 2009 2010 2011	N/A	N/A	22.589
	N/A	N/A	21.663
	N/A	N/A	21.663
	N/A	N/A	21.663

[Notice of Public Hearing]

As stated in the Notice of Public Hearing, for a residential customer in Rate Class 1 having an average consumption of 100 GJs per annum, the estimated year-over-year proposed increases are 22.76% on January 1, 2009, 6.34% on January 1, 2010, and 5.45% on January 1, 2011. The Board notes that the above rates apply only to the delivery component of the total customer bill and are unrelated to the commodity component. The delivery component is smaller than the commodity component.

[166] For the purposes of setting rates, the Board is satisfied that the revenue requirement proposed by Heritage for the three year test period is reasonable.

[167] Moreover, the Company retained Chymko to conduct a COSS, which allocated costs across the rate classes. The Board approved Heritage's rate design methodology.

[168] Among the various undertakings that were requested of Heritage at the hearing, several involved analysis related to the potential impact of different scenarios on rates:

- 1. Impact of limiting the Rate Class 1 increase to 10% in 2009 (Undertaking 1);
- 2. Impact of 50% reduction in all proposed rates (Undertaking 1);
- 3. Impact of rolling out all proposed rate increases equally over the three year test period (Undertaking 6(a));
- Impact of eliminating depreciation for the three year test period (Undertaking 15);
- 5. Impact of creating a separate rate class for the residential customer and limit the 2009 increase to 10% (Undertaking 18); and
- 6. Impact of a 1% reduction in the allowed rate of return (Undertaking 26).

[169] Heritage addressed each of the above scenarios in its post-hearing submission.

### **Findings**

[170] The Board accepts the view of Heritage that the RDA would be negatively impacted under Scenarios #1, #2 and #3. Further, no cost of service or rate design analysis has been presented respecting Scenario #5 and Heritage stated this option may even result in higher rates for residential customers. Scenarios #4 and #6 have been previously discussed in this decision.

[171] Taking into account all of the foregoing, the Board approves the proposed rates for the three test years, effective the date of this Decision.

The Board notes that Heritage initially requested the above rate increases to take effect as of January 1, 2009. However, due to the Company's delay in filing the Application, this Decision could not be issued in that timeline. As of January 1, 2009, Heritage was entitled to increase rates by 2.5% in each rate class, in accordance with the 2006 Rate Decision. The rates approved herein shall apply as of the date of this Decision.

#### VII MISCELLANEOUS MATTERS

#### a) Amendments to Service Rules

[173] The current Special Charges Schedule attached to Heritage's Service Rules does not contain a customer charge for the installation of a service line. In this Application, Heritage initially requested the following addition to the "Special Charges Schedule":

Installation of customer service line - \$500

At the hearing, Heritage changed its request by asking for a \$500 deposit rather than a \$500 charge for the installation of a customer service line. In an undertaking filed following the hearing, at the request of the Board, Heritage asked that the "Special Charges Schedule" be revised to provide for an "Installation Deposit" of \$500. In Undertaking No. 7, Heritage provided the amended version of its request, asking the Board to approve the following addition to the "Special Charges Schedule":

Customers will be charged an Installation Deposit of \$500 which must be paid no later than 90 days before the requested service installation. This amount will be credited to your account when you activate your service. The deposit will be forfeited if activation does not occur within 120 days after the service line is installed.

[175] Mr. Smith and Mr. Ritcey testified that the "Installation Deposit" is being sought to help improve activation rates of customers who have requested service. Mr. Smith indicated that some customers have requested to be connected to the system, but subsequently, for whatever reason, have delayed or refused to activate their service once the service line was installed. The Board recognizes that this has resulted in unnecessary expenses for Heritage and diverted important financial and human resources from other customers who are waiting to be connected to the distribution system.

[176] Heritage also requests that the "Non-Refundable Contributions" portion of the Service Rules be amended to read:

Applications for service may require a non-refundable customer contribution, including a contribution for the installation of a service line.

[177] In support of this request, Heritage states:

Heritage Gas notes that both Nova Scotia Power Inc. and the Halifax Regional Water Commission have the ability to require their customers to pay some or all of the costs of the extension of service to them.

[Exhibit HG-1, p. 18-2]

In a letter from the Board dated December 10, 2008, respecting Undertaking No. 7, Heritage was asked to clarify what and when it proposes to charge the "non-refundable customer contribution", and what "free distance" of service line will be installed for customers before they are charged for any further length of the line to their dwelling or building.

[179] In response, Heritage stated:

The "Non-Refundable Contributions" will be requested when the cost for installation exceeds the average cost per installation in a specific customer rate class or to help meet the feasibility test to provide service to a particular area.

The calculation of non - refundable contributions will be based on the following criteria.

- A) Where the cost to provide service exceeds the amount of Heritage Gas investment determined through a Net Present Value economic analysis, Heritage Gas at its sole discretion shall be entitled to request a non-refundable contribution.
- B) Other factors considered to evaluate if a non-refundable contribution is required may include one or more of the following criteria.
  - a. When a customer has required construction of the service line under winter conditions.
  - b. Where the length of service exceeds 30 meters.
  - c. Where land rights must be incurred to serve the customer.
  - When additional protection or investment is required due to municipal regulations to protect a meter set encroaching in the municipal right - of -way.
  - e. When a customer has requested a Temporary Service to be in place for less than twelve (12) months.
  - f. When it is necessary to help meet the feasibility test to provide service to a particular area.

The calculation of the non-refundable deposit will remain the same as currently set out in the Service Rules.

[Heritage, Revised Undertaking No. 7]

#### **Findings**

[180] The Board approves the "Installation Deposit" of \$500, on the basis of the proposed clause noted above to be added to the "Special Charges Schedule". The Board observes that upon activation, within 120 days after the service line is installed, the deposit is to be credited to the customer's account.

The Board has concerns with the proposed clause respecting the "non-refundable customer contribution" and how it is to be applied to customers. The Board concludes that Heritage's requested wording for the "non-refundable customer contribution", as proposed, is too vague. In the Board's view, any proposed language for charges or contributions sought from customers must be sufficiently clear to allow

customers, as well as the Board, to determine how the "non-refundable customer contribution" will be determined and in what amount. Based upon a reading of the wording proposed by Heritage, the Board considers that a customer will not be able to determine how, and in what amount, the "non-refundable customer contribution" will apply.

In essence, customers should be able to know what their cost, if any, will be for the installation of a service line. In the view of the Board, the new clause proposed by Heritage for calculating the cost to the customer is subject to various factors that are at the discretion of the Company and generally unknown to the customer. Moreover, the application of the various factors identified by Heritage could, in the Board's opinion, lead to different results for a range of customers. The cost of any non-refundable contributions for the installation of a customer service line should be consistent for all customers.

[183] Accordingly, the Board is not prepared to approve the proposed clause respecting the "non-refundable customer contribution" until Heritage provides a clear methodology for calculating any contribution to be borne by the customer in each instance. Upon the filing of a new proposal, the Board will consider the revised language after the intervenors have had an opportunity to provide their comments. Until Heritage complies with this directive, the Board has concerns about whether the Company is consistently applying the "non-refundable customer contributions" to its customers with respect to the installation of service lines.

[184] In the interim, the Board notes that the "Installation Deposit" approved above is not to be applied by Heritage against any installation costs to be paid by a customer.

### b) Rate Schedules - Other Fees and Charges

[185] Heritage requests that a clarification note be added to the "Other Fees and Charges" portion of its Tariff Rate Schedules to reflect the direction of the Board in its decision in NSUARB-NG-HG-02 that Heritage form a working group with licenced gas marketers when such marketers become active in Nova Scotia. Heritage submits that the fees listed in this section of its Tariff should be the subject of discussion with that working group when it is formed.

In response to an Information Request from the Board asking whether this request is merely repetitive of the Board's earlier directives, Heritage states that the purpose of adding the clarification note is to act as a reminder to potential gas marketers, some of whom may be new to the market.

#### **Findings**

[187] While the Board considers that the addition of the above clarification note is not technically necessary, it approves this additional note for the purposes of providing clarity to new gas marketers entering the market.

### c) Weather Normalization

[188] In its 2004 Rate Decision, at paragraph 28, the Board agreed that weather normalization of revenues was appropriate:

The Board also agrees that in the operation of the revenue deficiency account Heritage use weather normalized revenues as opposed to actual revenues. Use of weather normalized actuals leaves the risk of weather with the utility as opposed to the customer. It should also result in less dramatic variations in revenue differentials.

[189] To date, Heritage has used a 30-year degree day average for weather normalization. In this Application, Heritage has used a 20-year average to normalize consumption, and suggests that this approach is more appropriate:

... many natural gas distribution utilities use a 20 year average and some are moving to a 10 year time frame. In this context, Heritage Gas believes that use of a 20 year rolling average for weather "normalized" consumption is appropriate.

[Exhibit HG-1, p. 8-1]

[190] In her evidence filed with the Application, Ms. McShane supports the 20-year average:

Heritage Gas is proposing to use a 20-year degree day average for the purpose of normalizing forecast deliveries. Use of a 20-year average is well within the typical range of methodologies used by Canadian gas distributors for the same purpose. The trend has been to shorten the period over which degree days are normalized to take account of the fact that the experienced number of degree days has been declining over time.

[Exhibit HG-1, p. 8-2]

[191] ECI, in its evidence, also agreed with the 20-year average:

ECI agrees with Heritage that the use of the 20 year rolling average with a correction factor for weather normalization is more accurate and appropriate than using the 30 year average based on 1970 to 2000 data. The 20 year rolling average will capture the shorter term trends in weather, as described in the letter from Kathy McShane of Foster Consultants. Most other Canadian gas utilities have been migrating towards shorter rolling periods in their weather normalization, as shorter term periods are better able to capture weather trends.

[Exhibit HG-10(a), p. 8]

[192] The issue was discussed briefly during the Board's questioning of the ECI panel:

Q. And on page 8, starting at line 30, we talk about "migrating to a shorter roll-in period for the weatherization." There's a fair amount of discussion about this all through the documents of 30 years, 20 years and 10 years, and so that for whatever reason Heritage Gas decided not to go to 20 years and decided to stick to 10 -- or not to go to 10 but stick to 20, so this is what you expect to see in the future, they might move to a 10-year moving average?

- A. (Ryall) It is possible at some point in the future that Heritage may decide that a 10-year average is more appropriate to capture weather trends, but we have experience in other jurisdictions where perhaps moving to a 10-year average is -- attempts to capture those trends too much isn't a great way to say it, but may not give you the correct baseline of weather to accurately assess what, in fact, is the -- would be an expected weather pattern. Ten years may not be -- may be too short, in some circumstances.
- Q. And so right now, stick with 20 years, we're safe, and it's a fairly good indicator where the weather patterns are.
- A. (Sandison) Twenty years seems to be quite appropriate.

[Transcript, December 2, 2008, pp. 566-567]

#### **Findings**

There was no evidence presented by the intervenors, or cross-examination, which would suggest any objection to Heritage using the 20-year average. The Board agrees that the approach is reasonable and accepts Heritage's proposal to use the 20-year average for purposes of weather normalization.

# d) International Financial Reporting Standards

[194] Heritage, along with every other company in Canada, will be faced with changing its accounting policies to International Financial Reporting Standards ("IFRS") for the years ending after January 1, 2011. The Company stated as follows:

... we've done our initial diagnostic of the impact of IFRS on Heritage Gas and we're continuing to work with -- studying the implications with our shareholder companies.

[Transcript, December 1, 2008, p. 190]

[195] The main concern is whether the RDA will be classified as an asset under IFRS. This could lead, as stated in the hearing, to two sets of financial records:

- A. ... our fear is more along the lines is that we would have two sets of books; one for financial accounting purposes, and one for regulatory purposes. So if an asset's been defined as an asset by this Board, and everything else that we've done, as we've -- as we -- from a regulatory process, we'd have to have a set of books to produce along those lines, which would then need to be reconciled back to the financial accounting statements, as defined by IFRS. So I think that's where the current worry is, long term.
- Q. So these are the extra accounting costs to do this of no value to the ratepayers, and unfortunately, it's the costs incurred because of accountants wanting to do something.
- A. Potentially, yes.

[Transcript, December 1, 2008, p. 215]

### **Findings**

[196] The Board recognizes that there is great uncertainty about the application of IFRS to the financial statements of rate regulated entities. The Board is keenly aware that there are developments occurring at the international level that may or may not alleviate some of the uncertainty. There are consultations ongoing in Canada between other regulatory agencies and regulated entities to determine how to respond to the IFRS accounting policies.

[197] The Board orders the Company, along with its regular annual filings, to identify those financial statement items that may be materially impacted upon the adoption of IFRS.

The regulated activities, and their financial representation, are different from that as described in the Company's annual financial statements. In the future, both the Company's annual financial statements and the financial statements related to the regulated activities, which would include those directives given in this decision, should be filed with the Board.

### e) Location of Meters

[199] In cross-examination, HRM noted that they have "... seen a significant growth in connections requiring meters installed on HRM sidewalks ..." and went on to state:

So our issue is specifically with the meters being installed on the sidewalks, and, I guess, making sure it's the option of last resort. There's obviously costs in locating meters in awkward places in a building, or around the back of the building, or on top of the building, and I guess we would like Heritage to really look at some alternative metering technology.

[Transcript, December 1, 2008, p. 60]

### [200] Heritage responded:

...one issue that we do bring forward to HRM when we discuss these kind of issues is the safety of the system. So there are some very specific code implications that allow Heritage Gas to install its equipment in one location or another. So we cannot take any shortcuts that would compromise the safety of the system, and that's obviously paramount to Heritage Gas.

[Transcript, December 1, 2008, p. 61]

# [201] In its post-hearing submission, HRM stated:

... The current metering technology employed requires significant space on the sidewalks, introduces safety issues, and leaves generally unsightly utility infrastructure.

[HRM Post-Hearing Submission, p. 2]

# **Findings**

[202] The Board notes that HRM neither submitted any evidence regarding the safety aspects of meter installations, nor did HRM question these issues during its cross-examination of Heritage.

The Board is satisfied, through its Certifying Authority, ECI, that the location and protection of the meter installations meet all requirements of the Canadian Standards Association Z662-07, Oil and Gas Pipeline Systems, which is the code to which any gas pipeline in Nova Scotia must be designed, constructed and operated.

[204] HRM also appears to allege that some of the meters being installed by Heritage may offend the spirit of zoning and/or land-use bylaws enacted by the Municipality. The Board observes that any such concerns are beyond the scope of the Board's jurisdiction in the context of the present Application.

[205] Nonetheless, the Board encourages Heritage and HRM to continue to work co-operatively in determining mutually acceptable solutions to the issues of meter type and location. It is clearly in the interests of both parties that these issues be resolved.

#### VIII COMPLIANCE FILING

[206] As a result of the Board's decision, depreciation charges are suspended for the three year test period. For the purposes of the compliance filing, Heritage should assume that depreciation charges will resume in 2012, and beyond, at the current rates.

[207] The Board is approving the rates and charges as set out in the Application for the test years 2009, 2010 and 2011. However, the revenue requirement will vary with respect to the amortization of depreciation for plant in service and capitalization of operating costs, which impacts the determination of the RDA.

[208] For the purpose of the compliance filing, any assumptions which may impact 2012 and beyond should remain consistent with the Application, except as amended for amortization of the plant in service.

[209] Taking into account the above findings, the Board directs Heritage to file a revised RDA schedule (Schedule 6.3-1). This should be supported by any other material

the Company deems necessary for the Board to understand the revised schedule. In any event, this material must include the following revised schedules:

Schedules 3.1-1 to 3.1-4 Schedules 4.1-1 to 4.1-4 Schedules 5.1-1 to 5.1-6

Schedules 6.1-1 to 6.1-4

Schedules 7.1-1 to 7.1-4

Schedules 10.1-1 to 10.1-4

Schedule 12.1-1

#### IX SUMMARY OF FINDINGS

### a) Approval of rates

[210] Further to its jurisdiction under s. 22 of the *Gas Distribution Act*, the Board approves the proposed rates in all rate classes for the test period ending December 31, 2011. The rates for the current year are approved effective the date of this Decision. The rates for the following two years are effective on January 1, 2010 and on January 1, 2011, respectively.

#### b) Reporting to the Board

[211] The Board approves the three year test period. The reporting requirements previously ordered by the Board for the financial results shall be provided semi-annually. The six month results shall be filed within 90 days and the annual results no later than 180 days after the end of each respective period.

The Board also orders the Company to file, on an annual basis within 180 days of year-end, the achievement of sales targets comparing actual results to the targets as outlined in its Business Plan for the test years 2009, 2010 and 2011. Further, the Board orders Heritage to explain the variances and what actions, if any, are being taken to correct any shortcomings.

[213] The Board orders the Company, along with its regular annual filings, to identify those financial statement items that may be materially impacted upon the adoption of International Financial Reporting Standards.

### c) Suspension of depreciation charges/Revenue Deficiency Account

The Board shares the concerns of the intervenors as to whether the cross-over date of 2011 and the elimination date of 2019 of the Revenue Deficiency Account ("RDA") will be met by Heritage. It is to the benefit of ratepayers that the RDA be eliminated as soon as reasonably possible. To provide a cushion against any potential shortfall in revenue projections, and to help ensure that the cross-over and elimination of the RDA occurs within the timeframe outlined in the Application, the Board orders that depreciation charges be suspended for the test years 2009, 2010 and 2011. This suspension of depreciation charges will not alter the requested rates. The depreciation charges will resume in 2012, and beyond, unless the Board determines otherwise.

[215] A new depreciation study is to be done in advance of the next rate application, when amended depreciation charges will be considered by the Board. The

new depreciation study should incorporate the suspension of depreciation charges, the remaining economic life of plant in service, and the salvage in order to calculate the depreciation charges in the revenue requirement after 2011.

[216] The Board does not see any reason to conclude, as requested by some intervenors, that any remaining balance of the RDA after 2019 should automatically be absorbed by the shareholders.

[217] The Board orders that any amount of actual Other Utility Income from regulated activities earned by the Company be used to reduce the RDA balance.

### d) Capitalization

The Board accepts the projections of operating costs for the three test years as being reasonable. However, the current method applied by Heritage for the capitalization of operating costs will not be accepted after 2011. The Board directs Heritage to develop a new capitalization policy and submit it on or before December 31, 2010 for Board approval.

[219] The expense section of the Application shows the amount capitalized as a reduction from the total operating costs. In future rate applications, this statement should only show the operating cost portion of the expense categories.

#### e) Approved rate of return

The Board determines that the return on debt of 8.75%, the return on equity of 13.0%, and the debt to equity ratio of 55:45 be maintained. The Company is ordered to file a complete study on these matters for the next rate hearing. The Board also orders the Company to develop a set of criteria along with definitions, as to when it would consider itself to be a "mature" utility and to identify the transition milestones which Heritage should meet as it moves from a "greenfield" to a "mature" utility.

#### f) Rate Base

[221] The Board approves the proposed rate base, as amended for the suspension of depreciation charges, and the method of calculating rate base over the three year test period. The Board orders that a lead/lag study be prepared for the next rate hearing.

[222] The Board is satisfied that the expansion into the Amherst market was a prudent decision at that time.

[223] Heritage is directed to provide details of the mains feasibility test along with its applications for permits to construct when it expands into the areas of Fairview, Clayton Park and Bayers Lake. It further directs Heritage to continue to prepare community and mains feasibility test calculations for all new areas and all extension of its mains. The Board requires Heritage to include this information with its permit to construct applications.

### g) Rate design and rate classes

The Board approves the COSS methodology, except that it orders Heritage to carry out an infrastructure study and report to the Board as to how other utilities classify their distribution mains between Demand and Customer (Site). The study is to be submitted to the Board before the next rate application or, in any event, no later than December 31, 2010.

The Board agrees with the Company that, for purposes of the present Application, it is appropriate to design rates based on an R/C ratio of 1:1 for each customer class at the end of the three year test period. However, in the next rate application, a band of 95% - 105% should be considered in the determination of rates for all customer classes to avoid potential rate shock and other issues.

The Board approves the continuation of the existing rate classes. However, it directs that Heritage consider the following two alternatives as part of its next rate application: 1) residential customers consuming up to 150 GJ per year as a separate rate class; and 2) a possible change in the consumption boundary between Rate Class 1 and Rate Class 2.

#### h) Miscellaneous

[227] The Board approves an amendment to the Special Charges Schedule attached to Heritage's Service Rules to allow an "Installation Deposit" of \$500 to be charged to customers for the installation of a service line.

The Board does not approve a request by Heritage for a "non-refundable customer contribution" respecting the installation of a service line. In the interim, the Board notes that the "Installation Deposit" approved above is not to be applied by Heritage against any installation costs to be paid by a customer.

[229] The Board approves a request by Heritage that a clarification note be added to the "Other Fees and Charges" portion of its Tariff Rate Schedules to state that Heritage form a working group with licenced gas marketers.

[230] The Board accepts Heritage's proposal to use the 20-year average for purposes of weather normalization.

[231] The Board is satisfied that the location and protection of the meter installations meet all requirements of the code to which any gas pipeline in Nova Scotia must be designed, constructed and operated. The Board encourages Heritage and HRM to continue to work co-operatively in determining mutually acceptable solutions to the issues of meter type and location.

[232] An Order will issue upon receipt and review of the information requested in the compliance filing directive.

DATED at Halifax, Nova Scotia, this 12th day of February, 2009.

Roland A. Deveau

Kulvinder S. Dhillon

Murray E. Doehler