COMMONWEALTH OF MASSACHUSETTS

BEFORE THE DEPARTMENT OF PUBLIC UTILITIES

Fall River Gas Company

}

Docket DPU 96-60

SURREBUTTAL TESTIMONY OF

PAUL CHERNICK

ON BEHALF OF

THE ATTORNEY GENERAL

Resource Insight, Inc.

August 29, 1996

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EXHIBITS

Exhibit AG-PLC-2	Corrected Comparison of Proportional Responsibility and MBA Allocators
Exhibit AG-PLC-3	The Utilization of Base Supplies by Weather-Sensitive Load Plus Storage
Exhibit AG-PLC-4	Load Factor of "Base" Load

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2	0.	Are you the same Paul Chernick who filed direct testimony in this
2	Q٠	Are you the same rath Chermick who med direct testimony in this
3		proceeding?
4	A:	Yes.
5	Q:	What is the purpose of this surrebuttal testimony?
6	A:	I respond to several points made by Mr. Harrison in his rebuttal testimony on
7		behalf of the Fall River Gas Company.
8	Q:	Please summarize Mr. Harrison's rebuttal testimony.
9	A:	Mr. Harrison's rebuttal testimony covers several inter-related points, which
10		can be summarized in the following categories:
11		• The relationship between the MBA allocator and the competitive market
12		for citygate gas.
13		• Whether the MBA is a form of direct assignment.
14		• The riskiness of serving different load segments, and the allocation of
15		bad decisions, bad outcomes, and excess capacity.
16		• The comparison of the MBA allocator to the proportional responsibility
17		(PR) allocator, by way of a contrived and irrelevant example.
18		• The assertion that whatever load is designated as "baseload" should be
19		treated as having a 100% load factor, regardless of the facts.
20		• A discussion of the allocation of interruptible margin.
21		• Admitting to flaws in the implementation of the MBA as implemented
22		in the Company's filing, but asking that the Department instead
23		approve-sight unseen-an unspecified future implementation of the
24		MBA concept.

1 1. Identification and Introduction

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I will discuss each of these points in turn.

2. The MBA Allocator and Competition 2 How does Mr. Harrison relate the MBA allocator to the competitive 3 0: market for citygate gas? 4 5 A: This is Mr. Harrison's main rationale for the MBA. Mr. Harrison's arguments weave back and forth through the competitiveness issue, attempting to 6 demonstrate that the competitive market for gas sales somehow requires the 7 use of the MBA and the Company's biased application of the MBA approach. 8 9 These arguments can be simplified to three groups: 10 He asserts that the proportional responsibility (PR) allocation method is • not appropriate for the competitive market, requiring that it be replaced 11 by the MBA. 12 He argues that the Company should be allowed to burden the weather-13 • sensitive load to protect the Company's sales to baseload customers. 14 15 He contends that under the PR, the Company has lost and will continue • to lose sales customers to transportation. 16 He asserts that the migration of sales customers to transport is "unfair" 17 to the Company and injurious to shareholders and other sales customers. 18 He is wrong on each of these points. 19 Is the proportional responsibility allocation method appropriate for the 20 **Q:** 21 competitive market? 22 A: It is just as appropriate in a competitive market as in any other market. As I 23 will discuss below, Mr. Harrison's critique of the PR method rests on a highly unrealistic example, a straw-man version of the PR, and hiding the 24

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1		multiple deficiencies of the MBA method. The PR is at least as relevant to		
2		the competitive market as is the mis-named MBA. If the PR method is not		
3		sufficiently accurate, the Company should be working to improve it, such as		
4		by more detailed chronological modeling of the value of capacity.		
5	Q:	Should the Company be allowed to burden the weather-sensitive load to		
6		protect sales to high load-factor customers?		
7	A:	No. Several features of the MBA, or the Company's application of the MBA,		
8		understate the cost of serving the load segment designated as "baseload."		
9		• The treatment of "baseload" as if it had a 100% load factor.		
10		• The arbitrary assignment of the lowest-total-cost base supply to		
11		"baseload."		
12		• The exclusion from baseload of all costs related to the Company's		
13		errors, bad decisions, and bad luck, including excess capacity.		
14		• The Company's filing proposes providing LNG boil-off to the base-load		
15		segment at its commodity value, excluding all capacity value, but Mr.		
16		Harrison has now retracted that position.		
17		As I explained in my direct testimony, these ad hoc assignments make		
18		no sense in terms of cost causation; they are apparently intended to favor the		
19		Company's high-load-factor rate classes in the face of the perceived		
20		competitive threat. It is important to recall that this favoring of high-load-		
21		factor rate classes is just the latest whim on the part of some gas utilities. I		
22		recall the time in the 1980s, when many gas utilities opposed the seasonal		
23		CGA, to protect their weather-sensitive load from competition.		
24		The arguments Mr. Harrison advances in favor of not burdening the		
25		high load-factor classes could apply just as well to low load-factor classes. If		
26		the Company's proposal is adopted, marketers will find it easier to attract		

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1		heating load, just as they will find it harder to attract base load from the
2		Company's subsidized gas prices for those customers.
3	Q:	Can marketers price sales to base load at the gas prices developed by the
4		Company's MBA method?
5	A:	No. In order to meet the prices developed by the Company's MBA method
6		for the Company's definition of "baseload," a marketer would have to
7		• acquire sufficient resources to meet potential sales to the "baseload,"
8		and absorb the costs of any excess resources;
9		• acquire multiple base supply resources with different costing structures,
10		assign the (ex post) lowest-cost resources to the "baseload," and absorb
11		the excess costs of higher-priced resources;
12		• price sales to "baseload" as though it had a 100% load factor, and
13		provide additional capacity required by this load without charge; ¹
14		• share margins on interruptible sales with the "baseload" sales, even
15		though those sales would not pay for enough capacity to support their
16		own use, let alone interruptible sales;
17		• charge no margin or profit on "baseload" sales to cover any of the above
18		costs, or to compensate for the risk that the "baseload" sales will decline
19		due to customer operating levels and changes in gas supplier.
20		In a competitive market, marketers are free to assume these costs and
21		risks, and to absorb the resulting losses. It is unlikely that they would choose
22		to do so for any length of time. If the Company wishes to engage in this
23		behavior, it should do so through an unregulated subsidiary, and face the

¹ To match the Company's original proposal, the marketer would also need to provide some firm commodity without charging for any capacity at all.

- consequences marketers would face. The Company should not be allowed to
 manipulate pricing and color supplies to favor individual customers, unless
 its shareholders are willing to pay for those subsidies.
- 4 Q: Should the Commission be concerned with whether high-load-factor 5 customers are sales or transportation customers?

A: No. Contrary to Mr. Harrison's assertion on p. 14, the Company has not
shown that migration causes any harm to remaining ratepayers or
shareholders.² No return is earned on gas sales; shareholders should be
indifferent between transportation and sales. Excess capacity can be resold or
released. The utility's small amount of peaking plant, if it becomes surplus
for firm sales, can probably support profitable off-system sales.

12If the Company does face some strandable costs due to long-term13above-market resource commitments, as Mr. Harrison suggests (p. 19), it14should identify those costs and request appropriate ratemaking treatment.15Any such costs should be recovered from the classes for which they were16incurred, including transportation customers who were formerly sales17customers.³

³ Mr. Harrison's testimony hints that the Company may be concerned about the short-run costs of excess capacity due to migration after supply commitments have been made for the following year. This problem could be solved through a notice provision, assignment of capacity to departing customers, or a short-term transition charge on the departing customers.

 $^{^2}$ In Mr. Harrison's own example, the low-load-factor ratepayer would be indifferent between using his version of the MBA and losing competitive customers. Since the Company's proposed MBA does not cover the full cost of serving high-load-factor classes, or provide any compensation for the risk of serving them, the other customers are likely to be better off without these sales.

Q: Other than cost allocation, is there any reason to expect that large sales customers will migrate to transportation service?

3 A: Yes. Marketers will always have more flexibility to meet the requirements of 4 major customers. One customer may want a gas price that is fixed at the 5 beginning of the year, to facilitate planning. Another customer may want 6 prices that track the spot market, to ensure that its costs do not vary from 7 those of its competitors. A customer who can schedule usage well in advance can usually be offered a lower price than customers who need the flexibility 8 9 to increase usage on short notice. No regulated utility can match all these 10 options available in the competitive environment.

In short, migration to transport is inevitable and probably beneficial.

12 3. The MBA and Direct Assignment

Q: Is Mr. Harrison correct in denying that the MBA directly assigns gas costs?

This is largely a semantic argument. Mr. Harrison is correct that, in a narrow 15 A: technical sense, the MBA does not include direct assignment of gas costs to 16 classes. Rather, the MBA assigns gas costs to load segments, which has the 17 effect of allocating a disproportionate share of the low-cost base supply to 18 19 the high-load-factor classes. This is the practice generally referred to in the gas industry as "coloring:" assigning certain of the resources sent out on a 20 21 particular day to a particular type of load.⁴ The MBA is inherently a coloring 22 approach, as opposed to the PR, which avoids coloring supplies by allocating

⁴ Mr. Harrison appears not to understand the term "coloring," but this is the term that I have heard used to describe this practice for at least a decade.

all gas used on a particular day to all consumption on that day. If there were
 only one class with consumption in July and August, the MBA's coloring
 would be identical to direct assignment.

4 Q: Is the coloring of gas supplies in the MBA consistent with good regulatory 5 policy?

A: No. Coloring of gas supplies is generally looked upon with great suspicion,
since it offers so many opportunities for subsidies and unequal treatment
(both of which are rife in the Company's MBA). It is my understanding that
the DPU has recently frowned on the coloring of gas supplies in the
Company's Special Contracts (See Department 3/20/96 letter order re:
Special Contracts).

12 Q: Does Mr. Harrison justify the coloring of base gas supplies?

A: No. Mr. Harrison offers no rationale for retrospectively selecting the lowestcost base supply and assigning the cost of that gas to the "baseload" load
segment. He continues to argue that the coloring of gas supplies should use
total cost, rather than variable cost, but he does not provide any cost
justification for this practice.⁵

18 My direct testimony pointed out that the Company's approach to 19 coloring was inconsistent with utility planning and dispatch. I did not

20 propose that the Company use a different coloring approach; I recommended

21 that the Department reject the coloring of base supplies entirely. If supplies

⁵ He agrees that gas is dispatched on a variable-cost basis; if one base supply can be said to be more "base" than another, that relationship can only be determined by comparing the variable costs. As discussed below, the bulk load and the base load use base supplies at about the same load factor. Utilities should be seeking the lowest-cost gas supplies for *all* customers, not just certain classes or load segments.

are to be allocated by load segments (as in the MBA), rather than time
 periods (as in the PR), the allocation should consider base supplies as a
 group, without any form of coloring.

4 4. Baseload and Risk

5 Q: Does Mr. Harrison recognize any planning risk associated with serving 6 baseload customers?

A: No. Mr. Harrison apparently assumes that all risk is associated with weathersensitive customers and supports the assignment of all of the costs of bad
decisions, bad outcomes, and excess capacity to the bulk load (rebuttal
testimony at 13-14).

11 Q: Does base load impose planning risk?

Yes. For various reasons, base load varies significantly from month to month 12 A: and year to year. For example, firm sales sendout in July 1995 was $\sim 27\%$ 13 lower than in the normal year: this effect is obviously not driven by weather. 14 15 Similarly, the Company's estimate of 1995 baseload varies between months, in part due to a jump in sales to Rate G-53 in May 1995. The Company needs 16 to be able to meet growing loads, and will sometimes over-buy base supplies 17 (due to load reductions, shifts to transportation and failures of planned 18 19 expansions) and sometimes under-buy.⁶

20 Mr. Harrison denial that there is any risk associated with serving large 21 baseload customers is at odds with his claim that the Company continually 22 faces loss of these loads to marketers who operate with the narrowest of

⁶ Large individual customer loads, as in Rates G-43 and G-53, may pose larger risks.

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margins. If Mr. Harrison is correct on the latter point, the large baseload customers are likely to be among the Company's riskiest sales customers.

3 5. The MBA and the PR: The Company's Contrived Example

4 Q: Please briefly describe Mr. Harrison's hypothetical comparison of the 5 MBA with the PR allocator.

6 A: Mr. Harrison presents a hypothetical that assumes two customers: an 7 extremely low load-factor customer A whose entire annual consumption 8 consists of 360 Dth on the peak day and a high-load factor customer B who 9 uses 1 Dth on all days of the year. The LDC serves Customer A's load 10 entirely with one supplemental supply and Customer B's load with one baseload supply. According to Mr. Harrison's calculations, an MBA allocator 11 12 would assign only the baseload supply to Customer B, while a PR allocator 13 would unfairly assign one-third of the supplemental gas costs to that highload-factor customer. Mr. Harrison concludes that the PR allocator is highly 14 skewed in favor of low load-factor customers, while the MBA is fair and 15 accurate. 16

Q: Does Mr. Harrison's hypothetical provide an accurate comparison of the Company's MBA approach with the PR allocator?

19 A: No, for the following reasons:

The claimed bias in the PR is almost entirely an artifact of using only
 two averaging periods in the calculation of the allocator. Mr. Harrison's
 hypothetical confuses two separate issues: (a) the choice of the MBA
 versus the PR allocator, and (b) whether there are to be class cost
 differentials in the CGAC.

In Mr. Harrison's contrived example, the MBA performs well, but it
 would fail if applied to a more realistic gas system. Mr. Harrison's
 hypothetical omits the important complications of a real gas system that
 the Company's MBA mishandles.

5 3. Mr. Harrison's hypothetical leaves out important features of the 6 Company's MBA that skew its results in favor of high-load-factor 7 customers. Therefore, his example fails to provide an accurate 8 representation of the Company's proposed approach.

9 Q: What is wrong with Mr. Harrison's illustration of the PR?

In his calculation of the PR, Mr. Harrison divides the year into only two 10 A: periods-the summer and the winter seasons. Gas costs are assigned to 11 season according to sendout, and allocated to Customers A and B according 12 to their consumption in each season. The difference between the PR and 13 MBA assignments in Harrison's hypothetical would be substantially reduced 14 if he had used a shorter averaging period. As shown in Exhibit AG-PLC-2, a 15 monthly rather than a seasonal PR analysis would reduce the winter gas cost 16 allocation to Customer B from \$3,330 to \$1,253. A daily PR analysis would 17 further reduce the allocation to \$652, or only \$22 above Mr. Harrison's 18 calculation of the MBA allocation. Therefore, under Mr. Harrison's 19 hypothetical, the two allocations would be virtually indistinguishable if the 20 PR were calculated on a more detailed basis. 21

The Company seems to believe that when rates are unbundled, gas costs can be allocated to rate classes only through the CGAC. Mr. Harrison equates the choice of the PR with recovery of gas costs entirely from a uniform seasonal CGAC (rebuttal testimony at 6). The Company would have us believe that the choice is between no gas cost allocation at all (except

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through a uniform seasonal CGAC) and the use of the Company's MBA in a
class-differentiated CGAC. The Company is incorrect. If costs are to be
differentiated in the CGAC, the PR can be used in that computation. If gas
costs are differentiated in base rate commodity charges, the PR can be used
there as well.

Q: What are some of the important complications of a real gas system that Mr. Harrison's hypothetical fails to address?

8 A: His simple comparison of the cost of sendout to meet the loads of 9 unrealistically high- and low-load-factor customers exaggerates the real cost differences. First, it ignores the ability of the Company to increase the 10 11 effective load factor on its system. In particular, the Company acquires 12 storage capacity to even out the load on its system. In effect, by injecting gas into storage in the summer for use in the winter, the Company shifts load 13 (measured at the point of gas acquisition) from the winter to summer. 14 Interruptible sales in the off-peak months also increase the system load 15 factor. 16

17 Using test year normal sendout data provided in Mr. Normand's 18 Workpapers, I calculated an effective system monthly load, taking into 19 account storage injections and withdrawals and interruptible sales. As shown 20 in Exhibit AG-PLC-3, these two uses of gas even out system load 21 substantially. When taken into account, the ratio of maximum to minimum average monthly load falls from about 8-to-1 to about 2-to-1. 22 23 Second, Mr. Harrison's hypothetical understates the cost of serving high-load-factor customers by overlooking such factors as: 24 1. the planning risk associated with serving baseload customers; 25

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1		2.	the daily fluctuation in baseload use, which results in a load factor	
2			much lower than the 100% that Mr. Harrison's hypothetical assumes.	
3	Q:	Hov	w would Mr. Harrison's hypothetical have to be revised to give a more	
4		accu	urate representation of the Company's MBA?	
5	A:	It would have to consider the effect of the following features of the		
6		Company's MBA:		
7		1.	At least two baseload supplies, instead of just one, with the cheaper of	
8			the two assigned to the base load;	
9		2.	Assignment of reserve or excess capacity entirely to the bulk load,	
10			ignoring the risks associated with serving the baseload customers; and	
11		3.	Fluctuating baseload treated as having a higher-than-actual load factor,	
12			or even a 100% load factor as Mr. Harrison recommends (p. 15, lines	
13			19–23).	

14 6. "Baseload" Load Factors

Q: What is Mr. Harrison's position on the Company's use of different capacity charges for base load and bulk load?

A: Mr. Harrison largely agrees with my direct testimony on utility planning
practices. Nonetheless, he claims that the MBA properly reflects load
variability, by mistakenly assuming that weather sensitivity is the only cause
of daily fluctuation in customer loads. He states that

1 For planning purposes, the base load portion of pipeline supply is 2 anticipated to be utilized at virtually 100% load factor. Therefore, the 3 most accurate calculation would be to identify the MDO required to 4 serve the base load portion of supply and then price out that capacity at 5 the pipeline's demand rate. This approach would result in pricing base load pipeline demand at 100% load factor (Rebuttal Testimony of J. L. 6 7 Harrison, p. 15, lines 19-23) 8 This is an exercise in fantasy, rather than analysis. His argument appears to be that the Company assumes that whatever it calls "base load" 9 10 has a 100% load factor, so it should be priced out at a 100% load factor.⁷ The problem with Mr. Harrison's "let's pretend" argument is that the "base 11 load" identified by the Company actually operates at much less than a 100% 12 13 load factor. 14 Mr. Harrison should know that the base load does not operate at 100%

load factor, since I discussed this problem in my direct testimony, and even
provided data on minimum and maximum loads (p. 12). In addition, just this
last March, he signed a letter to the Company reporting his firm's conclusion
that summer Saturdays have firm sendout averaging 3,565 Mcf below
weekdays, and summer Sundays have firm sendout averaging 3,374 Mcf
below weekdays (Exhibit AG-124, Attachment AG-3-36-1, p. 3).

21 On the low-load days, when sendout is as little as 11% of average load, 22 the Company either pays for capacity it cannot use, diverts supplies to 23 storage (which would not be available without the bulk load), or releases 24 capacity.⁸ On days with high base loads, when base-load sendout is as much

⁷ All unused capacity in any day of any month would be charged to the bulk load.

⁸ Actual sendout for 1995, as reported in Attachment AG-3-36-1, indicates that the Company was not able to increase interruptible sales to cover these base load fluctuations. Mr. Harrison asserts on page 17 that capacity release has no value; this assertion is unlikely to be

as 27% above average, the Company must borrow capacity from the bulk
 load, or provide extra capacity.⁹

3 Q: What load factors are typical of the "base" load identified by the 4 Company?

Exhibit AG-PLC-4 shows the load factors of the Company's firm sendout in A: 5 6 July and August, the basis for the Company's definition of base load, for 1995. Since the Company assigns a small portion of July and August load to 7 8 bulk load, I have computed the load factor for total load in these periods, as well as for the "base" portion of the load, consisting of sendout up to the 9 average daily sendout in July and August.¹⁰ The actual load factor in 1995 10 was 72%; with normal loads, this would be 70%. As shown in the last 11 column of Exhibit AG-PLC-4, if a marketer obtained capacity for 1995 based 12 on normal loads, but sendout followed the actual load, the load factor would 13 be 67%.11 14

correct, but if it is, it increases the amount of capacity that is obtained for the base load, but not used.

⁹ Mr. Harrison has asserted that the Company did not use storage to balance loads in 1995, leaving these other options, as well as the possibility that it borrowed supplies that would otherwise have been injected into storage to meet baseload sendout. Of course, the Company's means of balancing of baseload supplies will vary from year to year.

¹⁰ To maximize the load factor of the base load, I truncated daily loads at whatever level was necessary to achieve the targeted sendout. For the normal year, I used the base sendout computed for July and August in Mr. Normand's workpaper A69 (Exhibit FRG-17). For the actual year, I truncated loads in August (the higher of the two months) to bring the monthly sendout down to the July-August average.

¹¹ Since August is the higher-sendout month in the normal year, and July firm sendout was actually higher in 1995, our hypothetical marketer might acquire the wrong level of supplies for each month, and have even lower utilization.

Much of this variation is due to weekly work schedules; sendout is
 typically much lower on Saturday and Sunday than in the rest of the week.¹²
 This non-weather-sensitive base load would be similarly variable from day to
 day in other months, even if the *average* were equal in each month.¹³

5 Q: What load factor should be used in pricing base supplies for base load?

A: I recommend pricing all base supplies for all firm loads at the total load
factor for the supply, to reflect the costs of serving all loads in the presence
of other loads. If the Department decides to apply differential load factors by
class, the Company's base load should be assigned a load factor of 67%, to
reflect the actual shape and variability in this load.¹⁴

11 7. The Treatment of Interruptible Margin

Q: What does Mr. Harrison recommend for the allocation of interruptible margins?

A: Mr. Harrison takes the position that interruptible sales margins should be credited to all firm sales and transportation customers, based on their share of distribution capacity costs. If I understand his argument correctly, he is claiming that, if some formula used by Bay State Gas were applied to Fall

¹⁴ At this load factor, the base load would be able to support interruptible sales, and allocation of interruptible margins to all firm load would be reasonable.

¹² The Company's analysis in AG-3-36-2 shows large reductions in load on both summer and winter weekends.

¹³ One of the inherent problems with the MBA approach, and all load-segment approaches, is that it requires a conceptual division between portions of the load of a class on a single day. Separating the "base" usage of any class on a particular day in September or January from its bulk (or supplementary) usage on the same day is an entirely theoretical exercise.

River Gas, none of the interruptible margins would be assigned to the gas
 supply function.

3 Q: Is Mr. Harrison correct that none of the interruptible margins should be 4 assigned to the gas supply function?

A: Since he has not documented his analysis, it is unclear how Mr. Harrison
came to this conclusion. Perhaps he is assuming that Fall River's excess
capacity has zero capacity release value. This assumption does not seem
plausible. If the Company is really unable to get any margin on its reuse of
capacity, it should get out of the gas supply business.

Q: If gas costs were allocated according to an MBA, to which customers
 should interruptible sales margins be allocated?

A: So long as gas supply costs are allocated realistically, interruptible sales
margins should be distributed to all sales customers. For the MBA to be
realistic, it would at a minimum need to use a realistic load factor for base
load, avoid coloring of base supplies, and correctly price boiloff.

16 8. The Company's Infeasible Proposal For Gas Cost Allocation

Q: What is the Company's current proposal for the process of allocating gas costs?

A: That proposal has changed over time. Mr. Normand's direct testimony
appeared to request approval in this proceeding of a gas cost allocation based
on a normal weather year and a very odd supply year. That allocation would
be reconciled and updated in some unspecified manner in CGA proceedings.
His proposal also included the other errors noted in my direct—the coloring

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of base supplies, the overstating of base load factor, the misallocation of interruptible margins, the mispricing of LNG boiloff.

3 Mr. Harrison's prefiled rebuttal clarified or changed the Company's 4 proposal in three ways. First, he acknowledged the error in pricing LNG boil-5 off. Second, he proposed the use of an even more unrealistic load factor for 6 baseload (as discussed above). Third, he proposed that the allocation 7 developed for this proceeding not be used at all, and that all charges to 8 customers be based on future colorings and computations, to be performed by the Company and adopted with the minimal review typical of CGA 9 proceedings.¹⁵ He clarified Mr. Normand's testimony, by proposing that the 10 11 MBA be performed both on a forward-looking basis for allocating projected 12 gas costs and on a retrospective basis for reallocating cost in the CGA reconciliation. 13

In his live rebuttal, Mr. Harrison changed the Company's proposal
again, now suggesting that the MBA be performed only on a forward-looking
basis, with reconciliation through a uniform ¢/Mcf "adjustment factor" (Tr.
XIII, p. 35-36)

- Q: Would any version of the gas cost allocation process proposed by the
 Company constitute appropriate regulatory policy?
- A: No. The Company asks the Department to delegate essentially all cost
 allocation decisions to the Company. The CGA review process is too brief
 and expedited to allow for meaningful review of the many complex decisions
 involved in the Company's implementation of the MBA, particularly with

¹⁵ It is not clear why the Company went to the trouble of presenting its very complicated and arbitrary application of the CGA, if it did not seek Department approval for the resulting allocator.

regard to the selection of the supplies to be assigned to base load and the load
 factor to be imputed to that supply.

3 Mr. Harrison's proposal in his prefiled rebuttal would allow the 4 Company to select the baseload supply and load factor twice for each gas 5 year: once in projecting the CGA and a second time in the reconciliation. Had this system been in place in 1994, the Company would probably have 6 7 projected that Distrigas would have the lowest total cost (at about 8 \$3.20/MMBtu at 100%) and designate Distrigas as the supply for the base 9 load. In the reconciliation, the Company would have recognized that 10 Distrigas operated at a lower load factor (because the contract was suspended 11 for three months) and switched to treating CNG as the base load supply. This highlights a fundamental problem with the Company's whole approach to 12 13 coloring base supplies: identifying supplies to serve particular load segments 14 based on cost outcomes rather than the nature of the resource.¹⁶

Mr. Harrison's proposal in his oral rebuttal would allow the Company to understate the costs of serving the base load (as would have occurred in 1994, if the Company selected Distrigas as the base load supply), without effective review, and then allocate the majority of the resulting shortfall to the bulk load.

Interestingly, even though Mr. Harrison admits that the MBA filed by
the Company was performed improperly, the Company apparently feels it is
under no obligation to provide the Department with a realistic application of
the MBA.

¹⁶ In all versions of the Company's proposal, the selection of resources to color for the base load segment is based on hindsight at least to the beginning of the gas year. Mr. Harrison's prefiled rebuttal proposal extends this hindsight to the reconciliation stage a year later.

1 Q: Can the Company be trusted to apply the MBA in an equitable and 2 accurate manner?

No. While the Company's position on the implementation of the MBA is 3 A: essentially "trust me," the Company's performance does not support this 4 5 deference. As I discussed in my direct and above in this testimony, the 6 Company biased its analysis to understate the costs of serving base load in 7 several ways. In addition to the intentional biases (arbitrarily directing the lowest-cost supply to base load, overstating baseload load factor), the 8 9 Company appears to have made a number of numerical and conceptual 10 errors.

Mr. Harrison now agrees that the Company erred on LNG boil-off, and apparently also agrees that the Company should have used a normal supply conditions in the MBA allocation, rather than the peculiar conditions of 1995 (Mr. Harrison's rebuttal testimony, p. 17). He admits that the Company is not sure how to define normal supply conditions, which suggests that the Company's projections of costs underlying the MBA allocator will remain unreliable.

18 In addition to the errors I have already pointed out—some of which Mr. 19 Harrison accepts—my review of the Company's MBA example for this 20 / surrebuttal indicates yet another error. For some reason, the Company generally reports the same base sendout in each month, regardless of the 21 22 length of the month (e.g., Mr. Normand's workpaper A69, Exhibit FRG-17). For example, the G-52 base load is estimated at 18,690 Mcf in August, which 23 has 31 days, and based on the average consumption in July and August, each 24 25 of which has 31 days. Hence, the implied average consumption is 603 Mcf/d. September In October, with 30 days, this consumption rate would produce 18,087 Mcf; 26

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February would see just 16,881 Mcf. Yet the Company reports the same
 18,690 Mcf in February and October (and all the other 30-day months),
 which would imply that the baseload demand actually varies by month. This
 appears to be an error in the methodology, although it also further overstates
 the baseload component.

6 Q: If gas costs are to be allocated to rate classes, what procedure should be 7 followed?

A: Either the gas costs should be allocated in base rates set in a fully adjudicated
proceeding,¹⁷ or they should be allocated in the CGA using class differentials
set in an adjudicatory proceeding where interested parties are provided a
meaningful opportunity to review the proposed allocations. The Company
should not be allowed to change gas cost allocations without full review.

13 Allocators are usually developed as percentages from historical and 14 normalized data. Those allocators are applied in adjudicated cases, with full review of the derivation of the allocators and their application to total costs. 15 Allocation studies then guide (but do not determine) the allocation between 16 17 classes of rate changes. The Company proposes to compute the MBA for hypothetical normal weather and (some unspecified) normal supply, and then 18 apply to actual billing dollars, and implement the entire change in every 19 20 CGA, without an opportunity for a full technical review. The Department 21 should reject this approach.

¹⁷ Gas costs in base rates are not inconsistent with the Company's intention to unbundle transportation from sales. Other gas companies' rates include a base delivery charge for all customers and two gas charges for sales customers: a base-rate supply charge and a CGA.

- 1 Q: Does this conclude your surrebuttal testimony?
- 2 A: Yes.

Exhibit AG-PLC-2 Corrected Comparison of Proportional Responsibility and MBA Allocators

Applying PR Daily Applying PR Monthly Sendout Price Total Cost **Total Cost** Price Sendout Peak Day Peak Month \$3.50 \$4 1 \$3.50 \$105 Base supply 30 Base supply \$26 \$9,360 Peak Supply 360 \$26 \$9,360 Peak Supply 360 \$9,364 Total 361 \$25.94 \$24.27 \$9,465 390 Total Baseload Baseload \$25.94 \$26 1 \$728 Allocation 30 \$24.27 Allocation **Other Winter** Other Winter . Days Months Baseload Baseload \$627 179 \$3.50 \$3.50 \$525 Allocation 150 Allocation **Total Baseload** Total \$652 \$1,253 Allocation

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Exhibit AG-PLC-3 Utilization of Base Supplies by Weather-Sensitive Load Plus Storage



Resource Insight Inc. PLC [*]Sheet1 Chart 1,8/29/96,3:18 PM

Exhibit AG-PLC-4 Load Factor of "Base Load"

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	Actual	1995	Normal	Load	Capacity for Normal Load Actual Sendout
	Total	Base ¹	Total	Base ²	Base
Maximum Sendout	8,514	6,869	7,630	7,326	7,326
Average Sendout	5,416	4,921	5,212	5,154	4,921
Load Factor	64%	72%	68%	70%	67%

Sources:	Attachment AG-3-36-1:	Attachment AG-3-36-2:		
	Daily Sendout Analysis.	Daily Load Analysis, Column 9.		

Notes: 1 Highest August days reduced so August base sendout equals July-August average sendout.

2 Highest July and August days reduced so monthly sendout equals Company estimates of base load.