COMMONWEALTH OF MASSACHUSETTS

DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Bay State Gas Company	)	**D.T.E. 06-36**

Direct Testimony of Rebecca Bachelder
President, Blueflame Consulting
On Behalf of Hess Corporation

I. Qualifications

Q. Please state your name, affiliation and business address.

A. My name is Rebecca Bachelder. I am President of Blueflame Consulting. My business address is 80 Warwick Road, Melrose, MA, 02176. I represent Hess Corporation in all New England gas matters.

Q. Could you please describe your client?

A. Hess Corporation, ("Hess"), is a leading total retail energy provider in the Eastern United States providing retail energy service to commercial and industrial customer locations. Hess is the largest supplier of fuel oil to commercial and industrial customers and a major supplier of natural gas and electricity to large industrial, commercial and institutional end-users in the North East region. Hess is also a major wholesale supplier of natural gas to a large number of LDCs in the North East and Mid-Atlantic regions, and operates retail gasoline stations all along the East Coast. Hess provides wholesale services to its retail arm, local natural gas distributions companies ("LDCs"), and other retail service providers. Hess is one of the largest suppliers in New England and serves customers behind Bay State Gas Company.

Q. Please describe your educational and professional background.

A. I graduated Magna Cum Laude from the University of Massachusetts, Amherst in 1979 with a BBA in Finance and a minor in Economics. In 1984, I received a Master of Business Administration from Boston University.

I formed Blueflame Consulting in May of 2003 and have represented clients in proceedings in Connecticut, Massachusetts and Maine regarding natural gas and electric deregulation issues.

Prior to the formation of Blueflame consulting, I was Director, Legislative and Regulatory Affairs for AllEnergy Gas & Electric Marketing Company, an unregulated natural gas supplier with operations in the northeastern United States. My responsibilities included identifying areas of regulatory or legislative risk and opportunity, and representing AllEnergy in regulatory proceedings and formal or informal meetings with LDCs, to mitigate undue supplier risks, and to promote the competitive market in jurisdictions in New England, New York and New Jersey. I represented AllEnergy in numerous proceedings in Connecticut and Massachusetts, participated in collaborative groups in Connecticut, Massachusetts, New Hampshire and New York, and represented AllEnergy's interests in New Jersey and Rhode Island as well as the aforementioned jurisdictions. I was at AllEnergy from 1997 through 2003.

Prior to joining AllEnergy, I was employed by Boston Gas for eighteen years in a number of positions. I managed the Rates and Regulatory Group from 1988 through my departure in 1997. In that capacity, I made numerous appearances before the Massachusetts Department of Telecommunications and Energy ("DTE") where I appearied in a broad spectrum of both rate and policy proceedings. A complete list of my appearances and regulatory participation is included as Exhibit RSB-2.

1 **II. Purpose of Testimony**

2 Q. What is the purpose of your testimony in this proceeding?

3 A. The purpose of my testimony is to discuss Bay State Gas Company's ("Bay State's"
4 or the "Company's") proposal for a thirty percent capacity reserve as a means of
5 satisfying the directives issued by the Massachusetts Department of
6 Telecommunication and Energy, ("Department" or "DTE") in D.T.E. 05-27. I will
7 discuss the necessity of such a reserve; whether Bay State's proposal satisfies the
8 Department's requirements; the concerns I have with the specifics of Bay State's
9 proposal if a reserve is deemed necessary; and the potential impact of a thirty percent
10 reserve on the competitive market.

11 **III. Review of Company's Proposal**

12 Q. Could you please briefly describe the Company's filing?

13 A. To put the filing in context, Bay State was directed by the Department in D.T.E. 02-
14 75 to devise a system whereby it could "monitor" the usage of its grandfathered
15 customers. Again in D.T.E. 05-07, the Department reiterated its directive to Bay
16 State requiring the Company to submit a proposal to the Department to "monitor"
17 overtakes by its Grandfathered customers and "disconnect such customers if usage
18 exceeds their TCQ." Bay State Gas, DTE 02-75-A at 7. On March 1, 2006, Bay
19 State filed its proposal which lead to the initiation of this proceeding.

20 Q. Could you describe Bay State's proposal?

21 A. Yes, instead of presenting alternative methods for "monitoring" grandfathered
22 customer usage along with their costs and benefits, Bay State has proposed a

substitute proposal to establish a thirty percent reserve for grandfathered transportation customers which would change the nature of their grandfathered status. In addition to putting this status in jeopardy, their plan of a thirty percent reserve would cost grandfathered customers a minimum of $0.18 per Dth according to Bay State's rate design methodology. An additional provision has been proposed for Bay State's tariff whereby, if a marketer fails to deliver greater than thirty percent of its pool requirements on an Operational Flow Order ("OFO") day, regardless of the reason, the marketers' customers would lose their Grandfathered status.

Q. How does the Company attempt to justify its conclusion that a reserve for Grandfathered Customers is required?

A. The Company presented some statistics of the 20 largest imbalances of daily metered customers claiming this as the basis for its conclusion that it needed to establish a thirty percent reserve. These imbalances on face value range from 6.5 to 44 percent of nominations on the specific day. Additionally, the Company claims it needs a reserve to accommodate customers returning from transportation to sales.

Q. What is your reaction to the Company's proposal?

A. After review of the Company's data, and placing the Company's concerns into context, I have come to a few conclusions. First, I question the need for any reserve. The data used by Bay State to establish a thirty percent reserve is largely irrelevant. The Company merely reviewed data of marketer deliveries going back to the implementation of the Model Terms and Conditions for Transportation Service established by the Department commencing on November 1, 2000. The Company

1 sorted deliveries by the highest imbalances for each pool over that period and
2 assumed all of the imbalances were attributable to grandfathered customers. While
3 initially it appears to be a reasonable starting exercise, it does not withstand the rigor
4 required to impose an annual tax of at least $1.6 million per year on this class of
5 customers. Bay State assumed that all daily metered imbalances were attributable to
6 grandfathered customers, and in justifying such an assumption, made the additional
7 assumption that the imbalances were completely a result of delivery failures while not
8 accounting for any forecasting error. In fact, marketers must estimate usage for both
9 grandfathered and non-grandfathered daily metered customers and that estimation can
10 only be as good as data and the timeliness of that data received from the LDC.
11 Notwithstanding the foregoing, if one follows Bay State's assumption that the
12 imbalances were those attributable to Grandfathered daily metered customers,
13 eighteen of the days presented by Bay State occurred during normal winter days when
14 the system had ample excess capacity available to handle any imbalances. Only two
15 of the days identified in the "top 20" were OFO days, which are declared by the LDC
16 when the system is operating under constraints, and therefore, marketer deliveries are
17 required to be within 2 percent of usage or the marketer faces severe financial
18 penalties. The two OFO days included in the Bay State analysis occurred within the
19 first two years of implementation of Bay State's current program when there were
20 significant adjustments being made by marketers to operate under the new system,
21 and when nearly half of the marketers on the system decided to exit the market. It is
22 also significant to note that the Company did not experience any operational problems

on any of these days. Furthermore Bay State did not provide any evidence regarding general marketer performance on OFO or Critical Days.

Second, the calculations performed to arrive at the size of the reserve compared imbalances as a percent of nominations, not imbalances as a percent of design requirements of Grandfathered customers or daily metered customers. Bay State's imputation of a percentage imbalance relative to nominations to the amount of reserve required is simplistic and inappropriate. The thirty percent number selected by Bay State relates to imbalances as a percent of nominations. The correct comparison would be to compare the absolute volume of imbalance specific to grandfathered customers with the design Grandfathered pool MDQs.

Third, in addition to failing to establish either the need for a reserve at all or their chosen amount of thirty percent, it is simply not clear from their plan that Bay State will procure the most cost effective resource for the reserve. Such a reserve, if needed at all, would only need to be in place during the peak 10 to 20 days of the year, and would only be used if Bay State's firm capacity is fully subscribed. Bay State does not indicate the assumptions it would use to include the reserve in its resource planning, nor do they indicate the type of resource they would attempt to acquire to provide this backstop service.

Fourth, the rate design proposed by Bay State is not cost-based and could result in significant subsidies that could go to either transportation customers or sales customers, depending upon the resource Bay State acquires for the reserve. It will

1 also be paid for by all transportation customers regardless of the performance of the
2 customer's marketer.
3 Fifth, voiding a customer's grandfathered status for a single incident is
4 contrary to the Department's decision in D.T.E. 02-75-A. Bay State is not required to
5 plan for these customers. Moreover an inability to develop an adequate plan for
6 monitoring grandfathered customer usage does not warrant stripping these customers
7 of their grandfathered status.
8 Q. What is your recommendation to address Bay State's concerns?
9 A. There is no need to make such wholesale policy changes impacting customer costs
10 and status when improvements to operational rules and processes can be sought in the
11 alternative. Contrary to the initial impression left by Bay State's Exhibit BSG-1,
12 marketers have developed the expertise necessary to deliver reliably on Bay State's
13 system within the currently established rules and are doing so as I will show below.
14 With that said, there is room for improvements to operational rules and
15 processes which would inure additional cost benefits to customers and improve
16 reliability on Bay State's system. Bay State should evaluate its operating processes in
17 conjunction with marketers to make sure that Bay State and marketers are working
18 together in a way that will provide the communications and information necessary for
19 both parties to manage their loads as optimally as possible in a cost effective manner.
20 If an LDC and the marketers on its system work together in a cooperative manner to
21 improve delivery accuracy, system reliability will be enhanced. There are a number
22 of operational rules and processes that can be improved in order to bolster the

1 marketers' ability to deliver more accurately to their customers. Additionally and
2 quite significantly, Bay State should strive to improve its forecasting for non-daily
3 metered customer loads. Bay State appears to have significant difficulty in getting
4 the non-daily metered delivery forecasts right as shown in IR Hess 1-10.
5 Improvement of these processes will assist in minimizing under and over deliveries
6 and improve reliability. I will discuss these further below.
7 If the Department still requires Bay State to install metering to monitor
8 individual customers after reviewing the evidence in this proceeding, Bay State in
9 conjunction with marketers can evaluate the cost effectiveness of installing real time
10 metering on the largest 22 customers identified by Bay State as representing 30
11 percent of the design day load. A real time monitoring alternative where data would
12 be shared with marketers as soon as it is available could enable marketers to deliver
13 gas in quantities that better match daily customer usage, especially on OFO days.
14 Better information given to marketers and customers on a timely basis will help Bay
15 State and marketers to work together to ensure that the proper level of gas is delivered
16 for their mutual customers. The real-time data made available by this type of
17 metering may prove to add value to customers by allowing them to manage their daily
18 loads more effectively. It is this type of useful information we should strive to
19 develop rather than attempt to collect information merely to used for penalties.
20 Q. Has Bay State complied with the Department's directives in D.T.E. 05-27?
21 A. In my opinion, Bay State has not complied with the Department's directives in D.T.E.
22 02-75-A. The Department directed the Company "…to implement a system under

which Bay State will have the ability to monitor usage by these customers on a daily basis and to disconnect such customers if usage exceeds their TCQ. We further direct the Company to submit a report to the Department and explain how the system will work." Bay State Gas Company D.T.E. 02-75-A. *Department Order denying Bay State Motion for Reconsideration*. Bay State has reviewed only one metering or monitoring option for consideration by the Department for Bay State's transportation customers. Bay State simply rejected enhanced metering in general as an option and then instead jumped without rational basis to wanting to procure a reserve. The reserve proposal is an expedient and costly proposal meant to cover all of the bases in the unlikely event that all marketers' pools are thirty percent out of balance on a design day.

Q. Do you agree with Bay State that there is a problem in need of resolution?

A. I agree that there are problems, but I don't agree that they are the ones that Bay State proffers to exist. Nor do I believe that the plan they have put forth satisfies any problems that exist on the system and could in fact create its own set of issues I have analyzed the data Bay State has provided regarding grandfathered customer "over takes" and it is less than compelling. There are a number of problems associated with Bay State's analysis that I believe have lead the Department to conclude that the wrong problem exists.

Q. What are the problems with Bay State's analysis?

A. Exhibit BSG-1 analyzes the 20 greatest overtakes on Bay State's system since Bay State implemented its Model Terms and Conditions and assumes that all of the

1 overtakes are a result of grandfathered customers. By its own admission in SPR 1-3,
2 only 2 of those days were OFO days. Non-OFO days are not a problem and are
3 irrelevant to Bay State's premise that it must procure a reserve for grandfathered
4 customers. Bay State declares OFO days when it becomes critical for marketers to
5 strictly adhere to delivery requirements established for marketers when there are
6 constraints on the interstate pipeline and/or constraints on Bay State's system. On
7 non-OFO days, Bay State has adequate capacity to backstop any over take, and
8 penalties assessed for such over takes adequately cover the cost of utilizing those
9 resources. Additionally Bay State has the ability through Section 19.3 of its Terms
10 and Conditions to declare a customer or marketer specific OFO. Specific analysis of
11 OFO day performance is the relevant analysis to determine if marketers are
12 performing, or if grandfathered customers are over taking and therefore if any type of
13 reserve should even be considered.
14 Q. Have you done such an analysis?
15 A. Yes I have. I have attached Exhibit RSB-3 which analyzes OFO data provided by the
16 Company in IR Hess 1-7. Exhibit RSB-3 indicates that for the past four winters,
17 marketers have **overdelivered** on 146 days out of the 169 OFO days called, thereby
18 helping the system and reliability during times of stress. Marketers have only
19 underdelivered in excess of the 2 percent OFO imbalance tolerance on 14 occasions.
20 The percentage in excess of imbalance tolerance ranges from 1 percent to 4 percent of
21 nominations. When evaluating what that may translate to for a potential reserve, it

1 equates to only 1 percent of the MDQ when adjusting for the 2 percent tolerance
2 band. This hardly seems to warrant the panic presented by Bay State.
3 Q. How can Bay State justify their reserve proposal?
4 A. They can't. At best, Bay State could ask for a 1 percent reserve as marketers are
5 supposed to deliver within 2 percent of customer's usage on OFO days and have only
6 under delivered by 1 percent of their design day MDQ on 1 occasion in four years. If
7 we can use Exhibit RSB-3 as a proxy, marketers have only exceeded that 2 percent
8 MDQ delivery requirement on one day in the last 4 winters – by one percent on
9 December 3, 2002. This hardly seems to present the reliability problem that Bay
10 State puts forth.
11 Q. Why didn't your analysis include the 2000/01 and 2001/02 winters?
12 A. I excluded those winters because the market had to adjust to new market conditions
13 over that time period. Many marketers exited from Bay State's system during 2000,
14 2001 and 2002. Exhibit RSB-4 shows that the number of marketers dropped by half
15 from the 27 who were operating during 2000 to 14 in 2001 and to 13 in 2002. Exiting
16 marketers typically are the ones having trouble and pose a greater risk for delivery
17 accuracy than marketers with an ongoing business. From 2003 to 2006, the market
18 has consolidated even further going from 13 marketers to 7 marketers, with a
19 concurrent stabilization in reliability. It is logical to expect consistent, if not even
20 better, performance from the existing and sustained marketers. The Law of Large
21 Numbers indicates these marketers will more easily be able to forecast loads with
22 heightened accuracy for their larger customer pools.

1 Finally, there is typically a learning curve when new rules are implemented
2 for both the LDC and the marketers operating on the LDC. It is reasonable to assume
3 that the learning curve has effectively leveled out after two winters.
4 Q. What conclusions have you drawn from your analyses?
5 A. Put quite simply, Bay State has over-reacted without rational explanation to non-OFO
6 day imbalances and has not and cannot demonstrate a need for a reserve for
7 grandfathered customers. Exhibit RSB-3 demonstrates that the Model Terms and
8 Conditions have provided marketers with the proper incentives to deliver all of their
9 customer requirements, and then some, when the system needs them most.
10 Q. What about the need for a reserve for grandfathered transportation customers because
11 of the possibility they may return to sales service?
12 A. The Department has made it clear that these customers should be treated the same as
13 any new customer and will only be accepted back for sales service if the Company
14 has adequate excess capacity or can procure capacity for the returning customer in a
15 way that will not increase the overall average cost to existing sales customers.
16 Therefore, a reserve for this purpose is inappropriate and creates unnecessary costs.
17 Additionally it is logical and reasonable to assume such grandfathered transportation
18 customers, who have already exercised their right to choose a marketer for the
19 purposes of coordinating and procuring their significant gas needs, and find
20 themselves leaving their current marketer for whatever reason would continue to
21 exercise their right to choose and go with another marketer.

Q. Could you discuss further the operational issues that could enhance reliability and better address the issues Bay State has attempted to address by procuring reserve capacity for grandfathered customers?

A. The processes on Bay State's system that could use improvement from the marketers' point of view include:

1. Forecasting non-daily metered loads as accurately as possible by improving the algorithm methodology relied upon and ensuring that marketers can replicate Bay State's methodology and more precisely anticipate the amount of gas that will need to be delivered on a daily basis,
2. Giving marketers data regarding storage pricing at the beginning of the month to allow cost effective choices to be made by marketers regarding delivered resources,
3. Condensing the timeframe over which capacity assignment volumes are determined from Bay State's current 2 months to the 10 days other LDCs have achieved. This allows marketers to plan for and procure resources necessary to serve their pools.
4. Provide BTU factors by pool and pipeline as soon as they are available from the delivering pipeline. Bay State should indicate how its own supplemental supplies will affect the BTU content as well.
5. At the beginning of the month, Bay State should also provide a customer list for the daily metered pools to marketers in the same way they provide a list of the non-daily metered customers so a marketer can double check the

customers it believes are included in its daily metered pool with what Bay State believes the marketer to have in its pool.

While not an exhaustive list, these improvements would enhance reliability and the marketers' ability to deliver adequate resources to serve their customers.

Q. You mention improved forecasting of non-daily metered loads; is this a problem?

A. Yes, upon review of IR Hess-10, Bay State appears to have difficulty forecasting non-daily metered customer loads, especially in the shoulder periods. If we only examine the period after which Bay State has switched its system from the TMS system to the EASy system, the monthly shoulder period forecasting has deviated significantly from actual. Variances over the last 14 months since its implementation have still been significant with 4 months indicating weather adjusted forecast variances in excess of 20 percent variance from actual usage. Non-daily metered customer forecasting inaccuracy is a problem and it is this type of program enhancement that we should focus our efforts on. Finding ways to shut off the biggest customers in the unlikely event that they use more than their MDQ during an OFO, when evidence shows this is not a pressing problem, should not be the focus of our attentions in fixing system issues, and certainly does not warrant the procurement of reserve capacity in any amount for grandfathered customers.

Q. In the event the Department still desires Bay State to explore metering options, how should Bay state proceed?

A. Bay State should explore an array of metering options and provide a cost/benefit analysis of each option. Bay State already reviewed the Cadillac of all alternatives;

enhanced metering with flow control, and determined the cost would be about $35 million in capital to install such flow control meters on each grandfathered customer and was not cost-effective.

Bay State should review a real-time metering solution for a small group of Bay State's largest transportation customers as an alternative. Bay State asserts in its own pre-filed testimony that 22 of its largest grandfathered customers constitute 30 percent of its total grandfathered customer MDQs. Bay State could easily evaluate putting real time metering on these customers and compare usage to the customer's design MDQ. Bay State could provide this real time information to marketers serving these customers in order to foster more efficient reliable service.

Q. If the Department at some point decided that a reserve is necessary, how would you go about analyzing the right number for the reserve?

A. First I would state that implementing a reserve requirement for grandfathered customers is inappropriate in any amount because these customers should not be stripped of their grandfathered status. The LDC would now be planning for a portion of their load. Therefore, we cannot support establishing a reserve for these customers. Furthermore in the event the Department chooses to pursue this as an option, the methodology relied upon by Bay State in calculating their proposed reserve amount cannot be utilized. Applying a reserve to grandfathered customer load makes the assumption that the imbalances are a result of cuts in supplies when it is more likely that the marketers have underestimated daily metered customer usage – both grandfathered and non-grandfathered due to missing or incorrect historical reads,

customer usage pattern changes, or customer lists that don't agree between Bay State and the marketer. A reserve should not be put in place until all operating issues between LDCs and marketers and their customers, as described above, have been corrected, and if timely communication of data, satisfactory to both the LDC and marketers, has been established. However, again if we must proceed with the flawed assumption that under deliveries are due to marketer delivery failures, not forecasting, the methodology used by Bay State is still incorrect and 30 percent is far greater than necessary. The correct analysis would divide the pool imbalance by the total pool MDQ to arrive at a percentage. The 2 percent tolerance should be deducted to arrive at a percentage that could be used to evaluate for a potential reserve. In this case, the result is likely to be too small to justify the administrative complexities of implementation and administration.

Q. Again, assuming that all of the previous steps are taken, and it is determined that there should be a reserve, what resources would you recommend to use for that reserve?

A. If an LDC procures a resource to act as a reserve, the resource should be a dedicated reserve and should only cover circumstances where the Company expects to call an OFO. This would be in the form of a peaking contract that covers the coldest 10 or so days of the year. It should not be a long-term 365 day per year contract.

Q. What cost should be attached to the reserve?

A. The incremental cost of the reserve. Additionally, any mitigation revenues should accrue wholly to the customers who are paying for the reserve.

1 Q. Who should pay for the reserve?

2 A. The entities that have caused the need for the reserve should pay for it. Customers of
3 marketers who perform should not have to pay for a reserve. Bay State's rate design
4 does not apply the cost burden to the customers whose marketers have caused it.
5 Therefore, the proposal is not cost-based and violates the Department's cost
6 allocation principles.

7 Q. If the Department were to accept Bay State's proposal, what would be the impact?

8 A. Acceptance of Bay State's proposal given the evidence would be a travesty. In the
9 event that Bay State's proposal was to be accepted, $0.18 per Dth additional costs for
10 grandfathered customers is likely the best case scenario that could be expected. By
11 changing assumptions regarding resources acquired and mitigation of costs, an even
12 larger unit cost could result. Bay State's reserve charge, on top of the overall increase
13 in energy costs, will penalize the customers who together with marketers and LDCs
14 are the pioneers of restructuring. At the very least, Bay State risks upsetting
15 customers accounting for ten percent of its system MDQ. Implementing Bay State's
16 "CECRC" could also cause the very behavioral changes that Bay State feared in
17 concocting such a reserve, and could very likely result in a self-fulfilling prophecy
18 that will drive customers back to sales service and require the Company to acquire not
19 30 percent of the capacity needed, but 100 percent to serve these customers.

20 In any event, the Company's proposal is in fact an unnecessary tax on
21 competition, fueled by an unsubstantiated fear that marketers will not deliver during

1 periods of system constraint. To act on this fear by imposing this tax would be unfair
2 and wrong.

3 **IX. <u>Conclusion</u>**

4 Q. Could you please summarize your testimony?

5 A. Yes, It is clear from the analyses provided in my testimony that Bay State's proposal
6 is seriously flawed and that they have lead the Department to believe in prior
7 proceedings that a problem exists when it does not. Rather than order Bay State to
8 install expensive metering to monitor grandfathered customers, Bay State should be
9 ordered to work with marketers to ensure that operating protocols and information
10 sharing are in place to give marketers the ability to accurately forecast daily-metered
11 customer loads. Furthermore, Bay State needs to review its own forecasting of non-
12 daily metered loads to more accurately forecast non-daily customer needs.

13 We respectfully request the Department to reject Bay State's proposal in total,
14 and reexamine its directives in D.T.E. 02-75-A and D.T.E. 05-27 based on the
15 evidence in this proceeding. We suggest that a reserve or expensive metering is not
16 in the best interest of the public. Improving operational protocols and information
17 sharing is in the public interest.

18 Q. Does that conclude your testimony?

19 A. Yes it does.