



March 2, 2012

Mr. Jeff Derouen, Executive Director
Kentucky Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

RE: Case No. 2011-00395

RECEIVED

MAR 05 2012

PUBLIC SERVICE
COMMISSION

Dear Mr. Derouen:

Atmos Energy Corporation (Company) herewith submits an original and six (6) copies of the Company's responses to Staff's requests for information the Informal Conference Follow-up on March 1, 2012 in the above referenced case.

If deemed appropriate and there are no objections, we would request that the order reflect an effective date of 15 to 30 days after the issuance of the final order. The reason for the request is so that we can have the full authorization period for our program.

Please contact myself at 270.685.8024 if the Commission or Staff has any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Mark A. Martin".

Mark A. Martin
Vice President, Rates & Regulatory Affairs

Enclosures

cc: Collaborative Board Members
Mr. Mark R. Hutchinson

**Atmos Energy Corporation
Kentucky**

Case No. 2011-00395

**RESPONSES TO
COMMISSION STAFF'S
IC FOLLOW-UP
DATA REQUESTS**

VERIFICATION

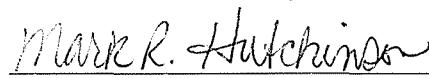
I, Mark A. Martin, being duly sworn under oath, state that I am Vice President of Rates and Regulatory Affairs for Atmos Energy Corporation, Kentucky/Mid-States Division, and that the statements contained in the following Responses are true and accurate to the best of my knowledge, information and belief formed after a reasonable inquiry.




Mark A. Martin

CERTIFICATE OF SERVICE

I hereby certify that on the 2nd day of March, 2012, the original of the Company's attached Responses, together with six (6) copies were filed with the Kentucky Public Service Commission, 211 Sower Blvd, P.O. Box 615, Frankfort, Kentucky 40206 and a copy was also served on Dennis Howard, Office of the Attorney General, 1024 Capital Center Drive, Suite 200, Frankfort, Kentucky 40601.



Mark. R. Hutchinson 



Atmos Energy Corporation
Staff's IC Follow-up Data Request Dated February 14, 2012
Case No. 2011-00395
Question No. 1
Witness: Mark A. Martin

REQUEST:

Refer to response 1, page 4 of 27 of the attached workbook.

- a) Explain why the Program Administration costs of \$46,903 for Residential and \$22,071 for Commercial include the number of estimated rebates for both the residential and commercial classes (calculation on page 7 of 27). If this is not correct, provide all necessary revisions.
- b) Explain why the Program Benefits of \$1,104,795 for Residential and \$695,923 for Commercial are apparently based on a 10 year NPV as calculated on page 10, when the NPV of benefits calculated on page 19 apparently uses 25 years. If this is not correct, provide a revised page 10 of 27 showing the NPV of program benefits for both the residential and commercial classes using a discount period of 25 years, along with all other necessary corrections.

RESPONSE:

- a) No, it is not correct. The totals have been corrected and the number of rebates removed from the calculation. Upon a closer examination we did discover that we had failed to back out the weatherization rebates and dollars from the residential customer class administration cost estimate. This correction has also been made.
- b) The table on page 10 (Schedule C) indicates that the benefit period goes through 2036 (25 years) with benefit amounts decreasing as the life of various measures expire. However, the formula was not updated and it was indicating 10 years. The formula has been corrected. The benefits on page 19 are correct and are in sync with the NPV on page 10.



Atmos Energy Corporation
Staff's IC Follow-up Data Request Dated February 14, 2012
Case No. 2011-00395
Question No. 2
Witness: Mark A. Martin

REQUEST:

Refer to response 1, page 8 of 27 of the attached workbook. Explain why only the first three items under Water Heater – Tankless were used in calculating the Average Incremental Cost versus using all four items including the \$1,210 cost to calculate the average Incremental Costs. If the \$836 average incremental cost is incorrect and it should be \$930, provide corrections of all pages affected including page 17 of 27.

RESPONSE:

This was Atmos' oversight and we apologize for any inconvenience this has caused. The correction has been made.

Atmos Energy Corporation
Staff's IC Follow-up Data Request Dated February 14, 2012
Case No. 2011-00395
Question No. 3
Witness: Mark A. Martin

REQUEST:

Refer to response 1, page 12 of 27 of the attached workbook. Explain why, for years 11 through 15, the amounts shown (either 0 or 1) were used in calculating the NPV versus the total residential and commercial amounts shown on page 13 of 27 for years 11 through 15. If years 11 through 15 need to be corrected on page 12 of 27, provide the new NPV amount using the corrected amounts, along with all other corrections necessitated by this change.

RESPONSE:

Atmos apologizes for this additional error. The corrections have been made. An amended workbook is attached correcting the errors found in DRs 1 thru 3.

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Atmos Energy's Demand Side Management Application October 2011

Program Summary

		Year 1	
Total DSM Cost for recovery	California Tests	G-1 Residential \$	G-1 Commercial \$
		674,258	432,988
Program Costs	<u>DCRC</u>	\$ 989,668	\$ 327,991
Lost Sales	<u>DLSA</u>	\$ 44,588	\$ 15,797
Program Incentive	<u>DIA</u>	\$ 103,900	\$ 89,200
Program Balancing Adjustment	<u>DBA</u>	\$ (463,898)	0
Annual Average Recovery Cost per Customer	<u>DSMRC</u>	\$ 4.40	\$ 25.11

	<u>Benefit/ Cost Ratio</u>
<u>Participant Test</u>	2.02
<u>Program Admin Test</u>	2.15
<u>Ratepayer Impact Test (RIM)</u>	0.63
<u>Total Resource Cost Test (TRC)</u>	1.13

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Atmos Energy Variable Data

Atmos Data		based on 12 months from May 2010 thru April 2011		
1.	# Kentucky Residential Customers		153,261	
2.	Residential Sales Volumes (Ccf)		105,470,435	
1a.	# Kentucky Commercial Customers		17,245	
2a.	Commercial Sales Volumes (Ccf)		47,754,931	
3.	Estimated Participants	Total	Residential	Commercial
a)	Furnace AFUE 90 - 93	900	600	300
b)	Furnace AFUE 94 - 95	600	400	200
c)	Furnace AFUE 96 or >	300	200	100
d)	Boiler AFUE 85 -89	15	10	5
f)	Tank Water Heater EF .62 - .66	100	75	25
g)	Tank Water Heater EF .67 or >	200	150	50
h)	Tankless/Condensing Water Heater EF >.82	200	150	50
k)	Programmable Thermostat (manual)	900	600	300
l)	Weatherization	125	125	0
m)	Commercial Fryer	25	0	25
n)	Commercial Griddle	25	0	25
o)	Commercial Oven	25	0	25
p)	Commercial Steamer	25	0	25
4.	Atmos Distribution Charge \$	0.110		
5.	Average Heat use (ccf) per customer	466.00		
6.	Average water heating use (ccf) per customer	196.00		
7.	Proposed Rebates			
	Furnace AFUE 90 - \$	250		
	Furnace AFUE 94 - \$	325		
	Furnace AFUE 96 or > \$	400		
	Boiler AFUE > 85 \$	250		
	Tank Water Heater \$	200		
	Tank Water Heater \$	300		
	Tankless/Condensing Water Heater \$	400		
	Programmable Thermostat \$	25		
	Commercial Fryer \$	500		
	Commercial Griddle \$	500		
	Commercial Oven \$	500		
	Commercial Steamer \$	500		
8.	Weatherization Program \$	3,000		
9.	Incremental Cost of 90-93 AFUE furnace \$	654		
	Incremental Cost of 94-95 AFUE furnace \$	973		
	Incremental Cost of 96 or > AFUE furnace \$	1,467		
	Incremental Cost of 85-89 AFUE boiler \$	1,000		
	Incremental Cost of Programmable Thermostat \$	14		
	Incremental Cost of .62 EF tank W/H \$	71		
	Incremental Cost of .67 EF tank W/H \$	634		
	Incremental Cost of .82-.90 EF tankless W/H \$	930		
	Incremental Cost for Gas Fryer \$	50		
	Incremental Cost for Gas Griddle \$	60		
	Incremental Cost for Gas Oven \$	50		
	Incremental Cost for Gas Steamer \$	420		
10.	Discount Rate	8.81%		

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Deemed Savings for Measures**

Measure	Efficiency Level	Kentucky	
		Savings (CCF)	Savings (Therm)
Forced Air Furnace	92% AFUE	126.6	130.3
Forced Air Furnace	94% AFUE	141.6	145.8
Forced Air Furnace	96% AFUE	156.0	160.6
Boiler	85% AFUE	49.0	50.4
Boiler	90% AFUE	92.5	95.1
Tank Water Heater	0.62 EF or greater	8.7	8.9
Tank Water Heater	0.67 EF or greater	23.4	24.1
Tankless Water Heater	0.82 - .90 EF	56.9	58.6
Tankless Water Heater	0.91 EF or greater	71.7	73.8
Condensing Water Heater	0.90 EF or greater	70.2	72.3
Programmable Thermostat	Manual	26.7	27.4
Weatherization	30% Savings	252.9	275.7
Fryer	EnergyStar	490.8	505.0
Griddle	EnergyStar	143.8	148.0
Oven	EnergyStar	297.4	306.0
Steamer	EnergyStar	1,036.0	1,066.0

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Billing Factor Calculation

Program Begins: January 1, 2012
Program Year End: December 31, 2012
Rate Effective: January 1, 2012

DCRC = DSM Cost Recovery-Current

Program Costs	G-1 Residential	G-1 Commercial
Rebates	\$ 497,500	\$ 278,750
Program Costs (Weatherization & Education)	\$ 395,000	\$ -
Customer Awareness	\$ 50,000	\$ 25,000
Program Administration	\$ 40,468	\$ 20,941
Supplies	\$ 6,700	\$ 3,300
Program Overhead	\$ -	\$ -
TOTAL DCRC	\$ 989,668	\$ 327,991
Excluding Rebates	\$ 492,168	\$ 49,241

DLSA = DSM Lost Sales Adjustment

Current Year Program Participation (Schedule A)

Rate	# of Participants	CCF Conserved	Distribution Charge	Lost Sales
G-1 Residential Customers	2,310	224,660	\$ 0.1100	\$ 24,713
G-1 Commercial Customers	1,130	143,605	\$ 0.1100	\$ 15,797
Total Current Year Lost Sales	3,440	368,265		\$ 40,510
Cumulative Prior Years Participation (Schedule B)	1,756	180,685	\$ 0.1100	\$ 19,875
TOTAL DLSC	5,196	548,950		\$ 60,400

DIA = DSM Incentive Adjustment

	G-1 Residential	G-1 Commercial
Program Benefits (Schedule C)	\$ 1,682,336	\$ 922,957
Less: Program Costs	\$ (989,668)	\$ (327,991)
Net Resource Savings	\$ 692,668	\$ 594,966
Incentive Percentage	15%	15%
DIA	\$ 103,900	\$ 89,200

DBA = DSM Balance Adjustment

	G-1 Residential	G-1 Commercial
<u>Under/(Over) Recovery</u>	<u>Estimated Residential Sales</u>	<u>Balancing Adjustment</u>
\$ (463,897.81)	\$ 105,470,435	\$ (0.00440)
		New program; hence no balancing adjustment

DSMRC = DSM Cost Recovery Component

	G-1 Residential		
Estimated Residential Sales	105,470,435	Ccf	
Estimated Residential Customers	153,261		
	<u>Recovery Amount</u>	<u>Rate, per Ccf</u>	<u>Rate, per Mcf</u>
DCRC	\$ 989,668	\$ 0.0094	\$ 0.0940
DLSA	\$ 44,588	\$ 0.0004	\$ 0.0040
DIA	\$ 103,900	\$ 0.0010	\$ 0.0100
DBA	\$ (463,898)	\$ (0.0044)	\$ (0.0440)
TOTAL DSMRC	\$ 674,258	\$ 0.00640	\$ 0.0640

Annual Cost Recovery per G-1 Residential Customers \$ 4.40

	G-1 Commercial		
Estimated Commercial Sales	47,754,931	Ccf	
Estimated Commercial Customers	17,245		
	<u>Recovery Amount</u>	<u>Rate, per Ccf</u>	<u>Rate, per Mcf</u>
DCRC	\$ 327,991	\$ 0.0069	\$ 0.0690
DLSA	\$ 15,797	\$ 0.0003	\$ 0.0030
DIA	\$ 89,200	\$ 0.0019	\$ 0.0190
DBA	\$ -	\$ -	\$ -
TOTAL DSMRC	\$ 432,988	\$ 0.0091	\$ 0.0910

Annual Cost Recovery per G-1 Commercial Customers \$ 25.11

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Annual Savings**

SAVINGS

Year	G-1 Res. Heating	G-1 Comm. Heating	G-1 Res. Water	G-1 Comm. Water	G-1 Comm. Cooking Equipment	Weatherization	Res. Total	Comm. Total	Total
1	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
2	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
3	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
4	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
5	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
6	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
7	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
8	180,343	90,171	12,705	4,235	49,198	31,613	224,660	143,605	368,265
9	180,343	90,171	12,705	4,235	36,929	31,613	224,660	131,335	355,996
10	180,343	90,171	12,705	4,235	36,929	31,613	224,660	131,335	355,996
11	180,343	90,171	12,705	4,235	3,596	31,613	224,660	98,002	322,663
12	180,343	90,171	12,705	4,235	3,596	31,613	224,660	98,002	322,663
13	180,343	90,171	12,705	4,235	-	31,613	224,660	94,406	319,067
14	180,343	90,171	8,541	2,847	-	31,613	220,496	93,018	313,514
15	180,343	90,171	8,541	2,847	-	31,613	220,496	93,018	313,514
16	164,339	82,170	8,541	2,847	-	31,613	204,492	85,016	289,508
17	164,339	82,170	8,541	2,847	-	31,613	204,492	85,016	289,508
18	164,339	82,170	8,541	2,847	-	31,613	204,492	85,016	289,508
19	-	-	8,541	2,847	-	31,613	40,153	2,847	43,000
20	-	-	8,541	2,847	-	31,613	40,153	2,847	43,000
21	-	-	-	-	-	31,613	31,613	-	31,613
22	-	-	-	-	-	31,613	31,613	-	31,613
23	-	-	-	-	-	31,613	31,613	-	31,613
24	-	-	-	-	-	31,613	31,613	-	31,613
25	-	-	-	-	-	31,613	31,613	-	31,613

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
 Demand Side Management (DSM) Program
 Energy Federation, Inc. Administrative Costs

EFI Budget Estimates for Administration of Kentucky DSM Appliance Rebate Program

Annual Budget

	Unit Cost	Residential Costs	Commercial Costs	Total Cost
Estimated Rebates		2,185	1,130	
Processing fee	\$ 9.00	\$ 19,665	\$ 10,170	\$ 29,835
"Cost of Money" Charge	1%	\$ 5,175	\$ 2,788	\$ 7,963
Reservation Fee	\$ 4.00	\$ 8,740	\$ 4,520	\$ 13,260
Customer e-mails (EFI to cust.)	\$ 2.50	\$ 1,093	\$ 565	\$ 1,658
Customer Service Phone Chg.(hours)	\$ 39.00	\$ 1,775	\$ 918	\$ 2,693
Program Management fee	\$ 1,500	\$ 4,020	\$ 1,980	\$ 6,000
Totals		\$ 40,468	\$ 20,941	\$ 61,408

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
DSM APPLIANCE INFORMATION

FURNACES					
Contractor Location	Brand	Unit Sizing	Avg. 80% Efficiency	Avg. 90% Efficiency	Incremental Cost
Bowling Green	York	2,000 sq ft	\$ 1,155	\$ 1,598	\$ 443
Danville	Carrier	2,000 sq ft	\$ 2,300	\$ 3,000	\$ 700
Danville	Trane	2,000 sq ft	\$ 1,700	\$ 2,500	\$ 800
Owensboro	York	2,000 sq ft	\$ 500	\$ 1,000	\$ 500
Owensboro	Rheem	2,000 sq ft	\$ 740	\$ 964	\$ 224
Owensboro	Carrier	2,000 sq. ft.	\$ 800	\$ 1,500	\$ 700
Average Incremental Cost					\$ 561

Contractor Location	Brand	Unit Sizing	Avg. 80% Efficiency	Avg. 92% Efficiency	Incremental Cost
Danville	Carrier	2,000 sq. ft.	\$ 2,300	\$ 3,200	\$ 900
Danville	Trane	2,000 sq. ft.	\$ 1,700	\$ 2,500	\$ 800
Owensboro	Heil	2,000 sq. ft.	\$ 800	\$ 1,376	\$ 576
Owensboro	Carrier	2,000 sq. ft.	\$ 800	\$ 1,700	\$ 900
Average Incremental Cost					\$ 794
Average Incremental Cost 90-92 AFUE					\$ 654

Contractor Location	Brand	Unit Sizing	Avg. 80% Efficiency	Avg. 94% Efficiency	Incremental Cost
Danville	Carrier	2,000 sq. ft.	\$ 2,300	\$ 3,400	\$ 1,100
Danville	Trane	2,000 sq. ft.	\$ 1,700	\$ 2,900	\$ 1,200
Owensboro	Heil	2,000 sq. ft.	\$ 800	\$ 1,418	\$ 618
Average Incremental Cost					\$ 973

Contractor Location	Brand	Unit Sizing	Avg. 80% Efficiency	Avg. 96% Efficiency	Incremental Cost
Danville	Carrier	2,000 sq. ft.	\$ 2,300	\$ 3,900	\$ 1,600
Danville	Trane	2,000 sq. ft.	\$ 1,700	\$ 3,000	\$ 1,300
Owensboro	Carrier	2,000 sq. ft.	\$ 800	\$ 2,300	\$ 1,500
Average Incremental Cost					\$ 1,467

Boilers					
Contractor Location	Brand	Unit Sizing	Avg. 80% Efficiency	Avg. 85% Efficiency	Incremental Cost
Danville	Weil-McLain	2,000 sq. ft.	\$ 8,000	\$ 9,000	\$ 1,000
Average Incremental Cost					\$ 1,000

WATER HEATERS - TANK TYPE					
Contractor Location	Brand	Unit Sizing	Avg. 58% Efficiency	Avg. 62% Efficiency	Incremental Cost
Consortium for Energy Efficiency Study 2008					\$ 71
Average Incremental Cost					\$ 71

Contractor Location	Brand	Unit Sizing	Avg. 58% Efficiency	Avg. 67% Efficiency	Incremental Cost
Lowes	Rheem	50 gallon	\$ 394	\$ 1,114	\$ 720
Lowes	Rheem	40 gallon	\$ 379	\$ 926	\$ 547
Average Incremental Cost					\$ 634

WATER HEATERS - TANKLESS					
Contractor Location	Brand Comparison	Unit Sizing	58% Eff Tank Type	82% Eff. Tankless	Incremental Cost
Lowes	Bosch	175,000 Btu	\$ 379	\$ 1,099	\$ 720
Home Depot	Rheem	199,900 Btu	\$ 388	\$ 1,199	\$ 811
Owensboro	Bradford White/Noritz	199,000 Btu	\$ 422	\$ 1,400	\$ 978
Bowling Green	A.O. Smith	199,000 Btu	\$ 390	\$ 1,600	\$ 1,210
Average Incremental Cost					\$ 930

COMMERCIAL GAS EQUIPMENT					
Taken from Savings Calculator for EnergyStar Equipment developed by U S EPA & DOE - Updated January 2011					
Gas Fryer					\$ 50
Gas Griddle					\$ 60
Gas Oven					\$ 50
Gas Steamer					\$ 420

THERMOSTATS					
Contractor Location	Brand Comparison	Model Number	Non-Programmable	Programmable	Incremental Cost
Home Depot	Honeywell	RTH7600 D7 Da	\$ 40	\$ 62	\$ 22
Home Depot	Honeywell	4238978	\$ 40	\$ 40	\$ 0
Home Depot	Honeywell	TH 110U1003	\$ 40	\$ 53	\$ 13
Home Depot	Honeywell	RTH6350D	\$ 40	\$ 60	\$ 20
Average Incremental Cost					\$ 14

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
 Demand Side Management (DSM) Program
 Schedule B - Cumulative Prior Years Program Participation

Program Year End: December 31, 2012

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Cumulative Total
Program Participants											
A. High Efficiency Appliances	20	1,071	401								1,492
B. Weatherization Program	105	136	23								264
Total Participants	<u>125</u>	<u>1,207</u>	<u>424</u>								<u>1,756</u>
Total Conservation in Ccf											
A. High Efficiency Appliance Savings	2,187	99,087	35,711								136,985
B. Weatherization Program	17,381	22,512	3,807								43,700
Total Ccf Savings	<u>19,568</u>	<u>121,599</u>	<u>39,518</u>								<u>180,685</u>
Total Lost Sales	\$ 2,152	\$ 13,376	\$ 4,347								\$ 19,875

NYMEX Escalators

Daily Settlements for Henry Hub Natural Gas Futures (PRELIMINARY) Trade from:

http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_quotes_settlements_futures.html

Month	Open	High	Low	Last	Change	Settle	Estimated Volume	Prior Day Open Interest
Dec-11	3.704	3.767	3.656	-	0.049	3.745	94,572	130,322
Jan-12	3.809	3.864	3.76	-	0.04	3.843	50,432	246,423
Feb-12	3.819	3.878	3.78	-	0.043	3.859	19,390	72,502
Mar-12	3.792	3.852	3.748	-	0.04	3.832	17,039	101,998
Apr-12	3.791	3.851	3.753	-	0.04	3.832	20,061	94,701
May-12	3.828	3.886B	3.794	-	0.039	3.869	9,998	35,266
Jun-12	3.86	3.926B	3.831	-	0.039	3.909	3,323	17,634
Jul-12	3.907	3.970B	3.881	-	0.039	3.955	1,461	18,468
Aug-12	3.925	3.997B	3.908	-	0.039	3.983	775	12,539
Sep-12	3.938	3.998B	3.911A	-	0.038	3.984	1,165	10,184
Oct-12	3.976	4.034	3.941	-	0.038	4.02	10,990	53,227
Nov-12	4.111	4.174B	4.092A	-	0.035	4.162	1,106	18,241
Dec-12	4.376	4.438	4.362A	-	0.032	4.427	1,169	19,676
Jan-13	4.499	4.563	4.489	-	0.028	4.55	2,445	29,236
Feb-13	4.51	4.55	4.48	-	0.028	4.538	47	5,159
Mar-13	4.462	4.504	4.431A	-	0.027	4.489	885	12,874
Apr-13	4.35	4.41	4.344A	-	0.026	4.398	1,925	23,123
May-13	4.383	4.44	4.382A	-	0.026	4.413	12	3,001
Jun-13	-	4.441B	4.388A	-	0.026	4.441	-	1,584
Jul-13	4.447	4.479B	4.431A	-	0.026	4.479	1	1,646
Aug-13	4.451	4.501B	4.448	-	0.025	4.498	10	1,701
Sep-13	4.451	4.502B	4.45	-	0.024	4.501	14	1,349
Oct-13	4.506	4.541B	4.485A	-	0.024	4.537	192	7,096
Nov-13	4.608	4.645B	4.595	-	0.022	4.651	41	1,164
Dec-13	4.83	4.881B	4.83	-	0.02	4.89	14	6,529
Jan-14	5	5	4.952A	-	0.018	5.006	1	3,649
Feb-14	-	4.967B	4.930A	-	0.017	4.979	-	477
Mar-14	-	4.898B	4.857A	-	0.016	4.901	1	995
Apr-14	-	-	-	-	0.006	4.731	1	3,404
May-14	4.7	4.715B	4.7	-	0.006	4.741	2	590
Jun-14	-	-	-	-	0.006	4.769	-	287
Jul-14	4.79	4.79	4.79	-	0.006	4.805	2	540
Aug-14	-	-	-	-	0.006	4.825	-	322
Sep-14	-	-	-	-	0.005	4.831	-	390
Oct-14	-	-	-	-	0.005	4.861	-	782
Nov-14	-	-	-	-	0.002	4.978	-	315
Dec-14	-	-	-	-	0.002	5.208	-	585
Jan-15	5.32	5.32	5.310A	-	UNCH	5.323	5	602
Feb-15	-	-	-	-	-0.001	5.29	-	185
Mar-15	-	-	-	-	-0.004	5.207	-	391

NYMEX Escalators

Apr-15	-	-	-	-	-0.012	4.999	-	1,918
May-15	-	-	-	-	-0.012	5.009	-	485
Jun-15	-	-	-	-	-0.012	5.037	-	1,200
Jul-15	-	-	-	-	-0.012	5.072	-	238
Aug-15	-	-	-	-	-0.012	5.092	-	597
Sep-15	-	-	-	-	-0.012	5.099	-	159
Oct-15	5.108	5.108	5.108	-	-0.012	5.129	3	221
Nov-15	5.23	5.23	5.23	-	-0.014	5.247	1	113
Dec-15	-	-	-	-	-0.014	5.475	-	6,374
Jan-16	5.58	5.58	5.58	-	-0.016	5.59	1	64
Feb-16	-	-	-	-	-0.018	5.558	-	50
Mar-16	-	-	-	-	-0.021	5.475	-	156
Apr-16	-	-	-	-	-0.031	5.26	-	183
May-16	-	-	-	-	-0.031	5.27	-	102
Jun-16	-	-	-	-	-0.031	5.298	-	221
Jul-16	-	-	-	-	-0.031	5.333	-	102
Aug-16	-	-	-	-	-0.031	5.358	-	102
Sep-16	-	-	-	-	-0.031	5.366	-	73
Oct-16	-	-	-	-	-0.031	5.396	-	43
Nov-16	-	-	-	-	-0.031	5.521	-	19
Dec-16	-	-	-	-	-0.033	5.754	-	350
Jan-17	5.88	5.88	5.88	#	-0.033	5.876	5	24
Feb-17	-	-	-	-	-0.033	5.844	-	6
Mar-17	-	-	-	-	-0.034	5.761	-	19
Apr-17	5.53	5.53	5.53	-	-0.037	5.531	1	17
May-17	-	-	-	-	-0.037	5.541	-	6
Jun-17	-	-	-	-	-0.037	5.569	-	39
Jul-17	5.6	5.62	5.6	#	-0.037	5.604	5	60
Aug-17	-	-	-	-	-0.037	5.637	-	58
Sep-17	-	-	-	-	-0.037	5.647	-	76
Oct-17	-	-	-	-	-0.037	5.681	-	14
Nov-17	-	-	-	-	-0.037	5.809	-	14
Dec-17	-	-	-	-	-0.037	6.036	-	23
Jan-18	-	-	-	-	-0.037	6.156	-	50
Feb-18	-	-	-	-	-0.037	6.124	-	33
Mar-18	-	-	-	-	-0.037	6.041	-	35
Apr-18	-	-	-	-	-0.037	5.781	-	40
May-18	-	-	-	-	-0.037	5.789	-	59
Jun-18	-	-	-	-	-0.037	5.817	-	35
Jul-18	-	-	-	-	-0.037	5.852	-	30
Aug-18	-	-	-	-	-0.037	5.885	-	34
Sep-18	-	-	-	-	-0.037	5.895	-	34
Oct-18	-	-	-	-	-0.037	5.941	-	66
Nov-18	-	-	-	-	-0.04	6.073	-	33
Dec-18	-	-	-	-	-0.042	6.301	-	38
Jan-19	-	-	-	-	-0.042	6.426	-	-
Feb-19	-	-	-	-	-0.042	6.396	-	-
Mar-19	-	-	-	-	-0.042	6.316	-	-
Apr-19	-	-	-	-	-0.042	6.006	-	20
May-19	-	-	-	-	-0.042	6.011	-	20
Jun-19	-	-	-	-	-0.042	6.036	-	17
Jul-19	-	-	-	-	-0.042	6.071	-	10
Aug-19	-	-	-	-	-0.042	6.108	-	10

NYMEX Escalators

Sep-19	-	-	-	-	-0.042	6.118	-	10
Oct-19	-	-	-	-	-0.042	6.166	-	75
Nov-19	-	-	-	-	-0.042	6.301	-	-
Dec-19	-	-	-	-	-0.042	6.531	-	-
Jan-20	-	-	-	-	-0.042	6.656	-	50
Feb-20	-	-	-	-	-0.042	6.626	-	-
Mar-20	-	-	-	-	-0.042	6.546	-	-
Apr-20	-	-	-	-	-0.042	6.236	-	-
May-20	-	-	-	-	-0.042	6.231	-	-
Jun-20	-	-	-	-	-0.042	6.253	-	-
Jul-20	-	-	-	-	-0.042	6.291	-	-
Aug-20	-	-	-	-	-0.042	6.331	-	-
Sep-20	-	-	-	-	-0.042	6.346	-	-
Oct-20	-	-	-	-	-0.042	6.406	-	-
Nov-20	-	-	-	-	-0.042	6.541	-	-
Dec-20	-	-	-	-	-0.042	6.771	-	246
Jan-21	-	-	-	-	-0.042	6.896	-	30
Feb-21	-	-	-	-	-0.042	6.866	-	30
Mar-21	-	-	-	-	-0.042	6.786	-	30
Apr-21	-	-	-	-	-0.042	6.476	-	30
May-21	-	-	-	-	-0.042	6.471	-	30
Jun-21	-	-	-	-	-0.042	6.491	-	30
Jul-21	-	-	-	-	-0.042	6.533	-	30
Aug-21	-	-	-	-	-0.042	6.573	-	30
Sep-21	-	-	-	-	-0.042	6.59	-	30
Oct-21	-	-	-	-	-0.042	6.65	-	30
Nov-21	-	-	-	-	-0.042	6.786	-	30
Dec-21	-	-	-	-	-0.042	7.018	-	30
Jan-22	-	-	-	-	-0.042	7.15	-	-
Feb-22	-	-	-	-	-0.042	7.12	-	-
Mar-22	-	-	-	-	-0.042	7.04	-	-
Apr-22	-	-	-	-	-0.042	6.73	-	-
May-22	-	-	-	-	-0.042	6.715	-	-
Jun-22	-	-	-	-	-0.042	6.753	-	-
Jul-22	-	-	-	-	-0.042	6.801	-	-
Aug-22	-	-	-	-	-0.042	6.846	-	-
Sep-22	-	-	-	-	-0.042	6.861	-	-
Oct-22	-	-	-	-	-0.042	6.926	-	-
Nov-22	-	-	-	-	-0.042	7.062	-	-
Dec-22	-	-	-	-	-0.042	7.294	-	-
Jan-23	-	-	-	-	-0.042	7.426	-	-
Feb-23	-	-	-	-	-0.042	7.396	-	-
Mar-23	-	-	-	-	-0.042	7.316	-	-
Apr-23	-	-	-	-	-0.042	7.006	-	-
May-23	-	-	-	-	-0.042	6.991	-	-
Jun-23	-	-	-	-	-0.042	7.031	-	-
Jul-23	-	-	-	-	-0.042	7.081	-	-
Aug-23	-	-	-	-	-0.042	7.126	-	-
Sep-23	-	-	-	-	-0.042	7.141	-	-
Oct-23	-	-	-	-	-0.042	7.206	-	-
Nov-23	-	-	-	-	-0.042	7.342	-	-
Dec-23	-	-	-	-	-0.042	7.574	-	-

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Participant Test

$$NPV_P = B_P - C_P$$

$B_P = \$$	3,665,686
$C_P =$	1,814,556
$NPV_P = \$$	<u>1,851,130</u>

Benefit-Cost Ratio **2.02**

Conclusion:

Since the net present value is greater than zero, the program will benefit the participants

Where:

NPV_P = Net present value to all participants
 B_P = NPV of benefit to all participants
 C_P = NPV of cost to all participants

$$B_P = \sum_{t=1}^N \frac{BR_t + TC_t + INC_t}{(1+d)^{t-1}}$$

$$C_P = \sum_{t=1}^N \frac{PC_t + BI_t}{(1+d)^{t-1}}$$

BR_t = Bill reductions in year t (not accounted for in participant cost test).
 BI_t = Bill increases in year t
 TC_t = Tax credits in year t
 INC_t = Incentives paid to the participant by the Utility
 PC_t = Participant costs in year t, which include
 incremental capital costs

The following calculations are based on the budgeted participation levels for year one of the program.

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Participant Test**

$$B_P = \sum_{t=1}^N \frac{BR_t + TC_t + INC_t}{(1+d)^{t-1}}$$

t	BR _t	TC _t	INC _t	B _P
1	250,538	-	776,250	1,026,788
2	280,098	-	-	280,098
3	298,821	-	-	298,821
4	313,554	-	-	313,554
5	327,651	-	-	327,651
6	342,440	-	-	342,440
7	356,180	-	-	356,180
8	368,653	-	-	368,653
9	368,073	-	-	368,073
10	374,651	-	-	374,651
11	345,653	-	-	345,653
12	351,856	-	-	351,856
13	354,191	-	-	354,191
14	354,298	-	-	354,298
15	360,694	-	-	360,694
16	339,101	-	-	339,101
17	345,246	-	-	345,246
18	351,514	-	-	351,514
19	53,158	-	-	53,158
20	54,128	-	-	54,128
21	40,520	-	-	40,520
22	41,260	-	-	41,260
23	42,016	-	-	42,016
24	42,787	-	-	42,787
25	43,573	-	-	43,573
	6,400,654	-	776,250	7,176,904

8.810% Discount Rate

\$3,665,686 NPV

- BR_t = Bill reductions in year t
 TC_t = Tax credits in year t
 INC_t = Incentives paid to the participant by the Utility

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Participant Test**

BR_t = Bill reductions in year t

G-1 Residential

t	(1) Ccf Conserved	(2) Projected Gas Cost*	(3) Demand Charge	(4) (2) + (3) Combined Rate	(1) x (4) BR _t
1	224,660	\$ 0.570	\$ 0.1100	\$ 0.68	\$ 152,841
2	224,660	\$ 0.651	0.1100	0.76	170,874
3	224,660	\$ 0.701	0.1100	0.81	182,296
4	224,660	\$ 0.741	0.1100	0.85	191,284
5	224,660	\$ 0.780	0.1100	0.89	199,884
6	224,660	\$ 0.820	0.1100	0.93	208,906
7	224,660	\$ 0.857	0.1100	0.97	217,288
8	224,660	\$ 0.891	0.1100	1.00	224,897
9	224,660	\$ 0.924	0.1100	1.03	232,282
10	224,660	\$ 0.942	0.1100	1.05	236,433
11	224,660	\$ 0.961	0.1100	1.07	240,668
12	224,660	\$ 0.980	0.1100	1.09	244,987
13	224,660	\$ 1.000	0.1100	1.11	249,392
14	220,496	\$ 1.020	0.1100	1.13	249,179
15	220,496	\$ 1.040	0.1100	1.15	253,678
16	204,492	\$ 1.061	0.1100	1.17	239,521
17	204,492	\$ 1.083	0.1100	1.19	243,862
18	204,492	\$ 1.104	0.1100	1.21	248,289
19	40,153	\$ 1.126	0.1100	1.24	49,639
20	40,153	\$ 1.149	0.1100	1.26	50,544
21	31,613	\$ 1.172	0.1100	1.28	40,520
22	31,613	\$ 1.195	0.1100	1.31	41,260
23	31,613	\$ 1.219	0.1100	1.33	42,016
24	31,613	\$ 1.243	0.1100	1.35	42,787
25	31,613	\$ 1.268	0.1100	1.38	43,573
					\$ 4,296,900

G-1 Commercial

t	(1) Ccf Conserved	(2) Projected Gas Cost*	(3) Demand Charge	(4) (2) + (3) Combined Rate	(1) x (4) BR _t
1	143,605	\$ 0.570	\$ 0.1100	\$ 0.68	\$ 97,697
2	143,605	\$ 0.651	\$ 0.1100	\$ 0.76	\$ 109,224
3	143,605	\$ 0.701	\$ 0.1100	\$ 0.81	\$ 116,525
4	143,605	\$ 0.741	\$ 0.1100	\$ 0.85	\$ 122,270
5	143,605	\$ 0.780	\$ 0.1100	\$ 0.89	\$ 127,767
6	143,605	\$ 0.820	\$ 0.1100	\$ 0.93	\$ 133,534
7	143,605	\$ 0.857	\$ 0.1100	\$ 0.97	\$ 138,892
8	143,605	\$ 0.891	\$ 0.1100	\$ 1.00	\$ 143,756
9	131,335	\$ 0.924	\$ 0.1100	\$ 1.03	\$ 135,791
10	131,335	\$ 0.942	\$ 0.1100	\$ 1.05	\$ 138,218
11	98,002	\$ 0.961	\$ 0.1100	\$ 1.07	\$ 104,985
12	98,002	\$ 0.980	\$ 0.1100	\$ 1.09	\$ 106,869
13	94,406	\$ 1.000	\$ 0.1100	\$ 1.11	\$ 104,799
14	93,018	\$ 1.020	\$ 0.1100	\$ 1.13	\$ 105,119
15	93,018	\$ 1.040	\$ 0.1100	\$ 1.15	\$ 107,016
16	85,016	\$ 1.061	\$ 0.1100	\$ 1.17	\$ 99,580
17	85,016	\$ 1.083	\$ 0.1100	\$ 1.19	\$ 101,384
18	85,016	\$ 1.104	\$ 0.1100	\$ 1.21	\$ 103,225
19	2,847	\$ 1.126	\$ 0.1100	\$ 1.24	\$ 3,519
20	2,847	\$ 1.149	\$ 0.1100	\$ 1.26	\$ 3,584
21	-	\$ 1.172	\$ 0.1100	\$ 1.28	\$ -
22	-	\$ 1.195	\$ 0.1100	\$ 1.31	\$ -
23	-	\$ 1.219	\$ 0.1100	\$ 1.33	\$ -
24	-	\$ 1.243	\$ 0.1100	\$ 1.35	\$ -
25	-	\$ 1.268	\$ 0.1100	\$ 1.38	\$ -
					\$ 2,103,754

- (1) Total projected Ccf savings, based on budgeted participation levels in year one of the program.
- (2) Based on Department of Energy "Annual Energy Outlook", converted to per ccf residential cost; where t = 1 = 2012
- (3) Volumetric charge for residential customers per Sheet No. 8 of the Company's tariff.

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
 Demand Side Management (DSM) Program
 Participant Test

TC_t = Tax credits in year t (presently no federal tax credits are available in 2012)

	(1) Program Participants	(2) Residential Energy Credits	(1) x (2) TC _t
<u>A. High Efficiency Heating Savings</u>			
<u>B. High Efficiency Water Heating Savings</u>			
Total	-		\$ -

Note: participants are eligible for tax credits in the year they incur expenditures for high-efficiency appliances, since this is an analysis of participation in a single year, the tax credit is applicable only where t = 1

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Participant Test

INC_t = Incentives paid to the participant by the Utility, for $t = 1$

<u>Energy Savings by Customer Class</u>	<u>INC_t</u>
G-1 Residential Customers	\$ 497,500
G-1 Commercial Customers	278,750
Total	\$ 776,250

Note: rebates are given to participant in the year they elect to participate, since this is an analysis of participation in a single year, the rebate is applicable only where $t = 1$

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Participant Test**

$$C_p = \sum_{t=1}^N \frac{PC_t + BI_t}{(1+d)^{t-1}}$$

t	(1) BI _t	(2) PC _t	(1) + (2) C _p
1	-	1,974,419	1,974,419
2	-	-	-
3	-	-	-
4	-	-	-
5	-	-	-
6	-	-	-
7	-	-	-
8	-	-	-
9	-	-	-
10	-	-	-
	..	1,974,419	1,974,419

8.810% Discount Rate

\$1,814,556 NPV

BI_t = Bill increases in year t (not accounted for in participant cost test).

PC_t = Participant costs in year t, which include
incremental capital costs

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Participant Test**

PC_t = Participant costs for t = 1

	(1) Program Participants		(2) Incremental Cost		(1) x (2) PC _t
<u>A. High Efficiency Heating Savings</u>					
Furnace AFUE 90 - 93	900	\$	654	\$	588,870
Furnace AFUE 94 - 95	600		973		583,600
Furnace AFUE 96 or >	300		1,467		440,000
Boiler AFUE 85 -89	15		1,000		15,000
Programmable Thermostat	900		14		12,668
Total	2,715				1,640,138
<u>B. High Efficiency Water Heating Savings</u>					
Tank W/H .62 - .66 EF	100	\$	71	\$	7,100
Tank W/H .67 or > EF	200		634		126,731
Tankless W/H .82 - 90 EF	200		930		185,950
Total	500			\$	319,781
<u>C. High Efficiency Commercial Kitchen Equipment</u>					
Gas Fryer	25	\$	50	\$	1,250
Gas Griddle	25		60		1,500
Gas Oven	25		50		1,250
Gas Steamer	25		420		10,500
Total	100			\$	14,500

IC = Incremental Costs for purchasing high-efficiency unit

(1) Based on budgeted participation levels in year one of the CEP.

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Program Administrator Cost Test**

$$B_{pa} = \sum_{t=1}^N \frac{UAC_t}{(1+d)^{t-1}}$$

(1)

<u>t</u>	<u>UAC_t</u>
1	\$ 210,029
2	\$ 239,590
3	\$ 258,313
4	\$ 273,044
5	\$ 287,142
6	\$ 301,931
7	\$ 315,671
8	\$ 328,143
9	\$ 328,913
10	\$ 335,492
11	\$ 310,160
12	\$ 316,363
13	\$ 319,094
14	\$ 319,812
15	\$ 326,207
16	\$ 307,255
17	\$ 313,400
18	\$ 319,668
19	\$ 48,429
20	\$ 49,397
21	\$ 37,042
22	\$ 37,783
23	\$ 38,539
24	\$ 39,310
25	\$ 40,096
	\$ 5,700,823

8.810% Discount Rate

\$2,605,293 NPV

(1) UAC_t scheduled per calculation performed for RIM test

UAC_t = Utility avoided supply costs in year t

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Program Administrator Cost Test

$$C_{pa} = \sum_{t=1}^N \frac{PRC_t + INC_t + UIC_t}{(1+d)^{t-1}}$$

t	(1) PRC _t	(2) INC _t	(3) UIC _t	C _{pa}
1	541,408	776,250	-	1,317,658
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-
	541,408	776,250	-	1,317,658

8.810% Discount Rate

\$1,210,972 NPV

- PRC_t = Program Administrator Costs in year t
- INC_t = Incentives paid to the participant by the Utility
- UIC_t = Utility increased supply costs in year t

- (1) Program costs scheduled from PRC_t which was calculated for the RIM Test
- (2) Incentives scheduled from INC_t which was calculated for the Participant test
- (3) No known increased supply costs as a result of operating the CEP

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Ratepayer Impact Measure (RIM) Test

$$NPV_{RIM} = B_{RIM} - C_{RIM}$$

$B_{RIM} =$	\$	2,605,293
$C_{RIM} =$		4,163,258
$NPV_{RIM} =$	\$	(1,557,965)

Benefit-Cost Ratio **0.63**

Conclusion:

Since the net present value is negative, the program will cause an increase customer rates.

Where:

- NPV_{RIM} = Net present value levels
- B_{RIM} = Benefits to rate levels or customer bills
- C_{RIM} = Costs to rate levels or customer bills

$$B_{RIM} = \sum_{t=1}^N \frac{UAC_t}{(1+d)^{t-1}}$$

$$C_{RIM} = \sum_{t=1}^N \frac{UIC_t + RL_t + PRC_t + INC_t}{(1+d)^{t-1}}$$

- UAC_t = Utility avoided supply costs in year t
- UIC_t = Utility increased supply costs in year t
- RL_t = Revenue loss from reduced sales in year t
- PRC_t = Program administrator costs in year t
- INC_t = Incentives paid to the participant by the sponsoring utility in year t

The following calculations are based on the budgeted participation levels for year one of the program.

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Ratepayer Impact Measure (RIM) Test

$$B_{RIM} = \sum_{t=1}^N \frac{UAC_t}{(1+d)^{t-1}}$$

t	UAC _t
1	210,029
2	239,590
3	258,313
4	273,044
5	287,142
6	301,931
7	315,671
8	328,143
9	328,913
10	335,492
11	310,160
12	316,363
13	319,094
14	319,812
15	326,207
16	307,255
17	313,400
18	319,668
19	48,429
20	49,397
21	37,042
22	37,783
23	38,539
24	39,310
25	40,096
	5,700,823

8.810% Discount Rate

\$2,605,293 NPV

UAC_t = Utility avoided supply costs in year t

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Ratepayer Impact Measure (RIM) Test**

UAC_t = Utility avoided supply costs in year t

t	Projected Gas Cost*	G-1 Residential		G-1 Commercial			UAC _t
		Annual Savings	Commodity Savings	Projected Gas Cost*	Annual Savings	Commodity Savings	
1	\$ 0.570	224,660	\$ 128,128	\$ 0.570	143,605	\$ 81,901	\$ 210,029
2	\$ 0.651	224,660	\$ 146,162	\$ 0.651	143,605	\$ 93,428	\$ 239,590
3	\$ 0.701	224,660	\$ 157,584	\$ 0.701	143,605	\$ 100,729	\$ 258,313
4	\$ 0.741	224,660	\$ 166,571	\$ 0.741	143,605	\$ 106,473	\$ 273,044
5	\$ 0.780	224,660	\$ 175,171	\$ 0.780	143,605	\$ 111,971	\$ 287,142
6	\$ 0.820	224,660	\$ 184,193	\$ 0.820	143,605	\$ 117,738	\$ 301,931
7	\$ 0.857	224,660	\$ 192,575	\$ 0.857	143,605	\$ 123,096	\$ 315,671
8	\$ 0.891	224,660	\$ 200,184	\$ 0.891	143,605	\$ 127,959	\$ 328,143
9	\$ 0.924	224,660	\$ 207,569	\$ 0.924	131,335	\$ 121,344	\$ 328,913
10	\$ 0.942	224,660	\$ 211,721	\$ 0.942	131,335	\$ 123,771	\$ 335,492
11	\$ 0.961	224,660	\$ 215,955	\$ 0.961	98,002	\$ 94,205	\$ 310,160
12	\$ 0.980	224,660	\$ 220,274	\$ 0.980	98,002	\$ 96,089	\$ 316,363
13	\$ 1.000	224,660	\$ 224,680	\$ 1.000	94,406	\$ 94,414	\$ 319,094
14	\$ 1.020	220,496	\$ 224,925	\$ 1.020	93,018	\$ 94,887	\$ 319,812
15	\$ 1.040	220,496	\$ 229,423	\$ 1.040	93,018	\$ 96,784	\$ 326,207
16	\$ 1.061	204,492	\$ 217,027	\$ 1.061	85,016	\$ 90,228	\$ 307,255
17	\$ 1.083	204,492	\$ 221,368	\$ 1.083	85,016	\$ 92,032	\$ 313,400
18	\$ 1.104	204,492	\$ 225,795	\$ 1.104	85,016	\$ 93,873	\$ 319,668
19	\$ 1.126	40,153	\$ 45,223	\$ 1.126	2,847	\$ 3,206	\$ 48,429
20	\$ 1.149	40,153	\$ 46,127	\$ 1.149	2,847	\$ 3,270	\$ 49,397
21	\$ 1.172	31,613	\$ 37,042	\$ 1.172	-	\$ -	\$ 37,042
22	\$ 1.195	31,613	\$ 37,783	\$ 1.195	-	\$ -	\$ 37,783
23	\$ 1.219	31,613	\$ 38,539	\$ 1.219	-	\$ -	\$ 38,539
24	\$ 1.243	31,613	\$ 39,310	\$ 1.243	-	\$ -	\$ 39,310
25	\$ 1.268	31,613	\$ 40,096	\$ 1.268	-	\$ -	\$ 40,096
Total Commodity Savings		\$ 3,833,425			\$ 1,867,398		\$ 5,700,823

- (1) Total projected Ccf savings, based on budgeted participation levels in year one of the program. These amounts continue to be saved year after year.
- (2) Based on Department of Energy 2011 "Annual Energy Outlook", converted to per ccf residential cost; where t = 1 = 2012

Note: the above analysis is based on the CCF conserved from a single year of participation in the CEP

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Ratepayer Impact Measure (RIM) Test**

$$C_{RIM} = \sum_{t=1}^N \frac{UIC_t + RL_t + PRC_t + INC_t}{(1+d)^{t-1}}$$

t	(1) UIC _t	(2) RL _t	(3) PRC _t	(4) INC _t	(1) + (2) C _{RIM}
1	-	250,538	541,408	776,250	1,568,197
2	-	280,098		-	280,098
3	-	298,821		-	298,821
4	-	313,554		-	313,554
5	-	327,651		-	327,651
6	-	342,440		-	342,440
7	-	356,180		-	356,180
8	-	368,653		-	368,653
9	-	368,073		-	368,073
10	-	374,651		-	374,651
11	-	345,653		-	345,653
12	-	351,856		-	351,856
13	-	354,191		-	354,191
14	-	354,298		-	354,298
15	-	360,694		-	360,694
16	-	339,101		-	339,101
17	-	345,246		-	345,246
18	-	351,514		-	351,514
19	-	53,158		-	53,158
20	-	54,128		-	54,128
21	-	40,520		-	40,520
22	-	41,260		-	41,260
23	-	42,016		-	42,016
24	-	42,787		-	42,787
25	-	43,573		-	43,573
	-	6,400,654	541,408	776,250	7,718,312

8.810% Discount Rate

\$4,163,258 NPV

- UIC_t = Utility increased supply costs in year t
- RL_t = Revenue loss from reduced sales in year t
- PRC_t = Program administrator costs in year t
- INC_t = Incentives paid to the participant by the sponsoring utility in year t

- (1) No known increased supply costs
- (2) see RIM Test RG; column (2)
- (3) see RIM Test RG; column (3)
- (4) Scheduled per calculation performed for Participant Test

Atmos Energy's Demand Side Management Application October 2011

Atmos Energy
Demand Side Management (DSM) Program
Total Resource Cost (TRC) Test

$$NPV_{TRC} = B_{TRC} - C_{TRC}$$

$B_{TRC} =$	\$	2,605,293
$C_{TRC} =$		2,312,128
$NPV_{TRC} =$	\$	<u>293,165</u>

Benefit-Cost Ratio 1.13

Conclusion:

Since the net present value is greater than zero, the program is a less expensive resource than the supply option upon which the marginal costs are based.

Where:

NPV_{TRC} = Net present value of total cost of the resource

B_{TRC} = NPV of benefits of the program

C_{TRC} = NPV of costs of the programs

$$B_{TRC} = \sum_{t=1}^N \frac{UAC_t + TC_t}{(1+d)^{t-1}}$$

$$C_{TRC} = \sum_{t=1}^N \frac{PRC_t + PCN_t + UIC_t}{(1+d)^{t-1}}$$

UAC_t = Utility avoided supply costs in year t

TC_t = Tax credits in year t

UIC_t = Utility increased supply costs in year t

PRC_t = Program administrator costs in year t

PCN_t = Net participant costs

The following calculations are based on the budgeted participation levels for year one of the program.

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Total Resource Cost (TRC) Test**

$$B_{TRC} = \sum_{t=1}^N \frac{UAC_t + TC_t}{(1+d)^{t-1}}$$

t	(1) UAC _t	(2) TC _t	B _{TRC}
1	\$ 210,029	-	\$ 210,029
2	239,590	-	239,590
3	258,313	-	258,313
4	273,044	-	273,044
5	287,142	-	287,142
6	301,931	-	301,931
7	315,671	-	315,671
8	328,143	-	328,143
9	328,913	-	328,913
10	335,492	-	335,492
11	310,160	-	310,160
12	316,363	-	316,363
13	319,094	-	319,094
14	319,812	-	319,812
15	326,207	-	326,207
16	307,255	-	307,255
17	313,400	-	313,400
18	319,668	-	319,668
19	48,429	-	48,429
20	49,397	-	49,397
21	37,042	-	37,042
22	37,783	-	37,783
23	38,539	-	38,539
24	39,310	-	39,310
25	40,096	-	40,096
	<u>\$ 5,700,823</u>	<u>-</u>	<u>\$ 5,700,823</u>

8.810% Discount Rate

\$2,605,293 NPV

UAC_t = Utility avoided supply costs in year t

TC_t = Tax Credits in year t

- (1) Scheduled per calculation performed for RIM Test
- (2) Scheduled per calculation performed for Participant Test

Atmos Energy's Demand Side Management Application October 2011

**Atmos Energy
Demand Side Management (DSM) Program
Total Resource Cost (TRC) Test**

$$C_{TRC} = \sum_{t=1}^N \frac{PRC_t + PCN_t + UIC_t}{(1+d)^{t-1}}$$

t	(1) PRC _t	(2) PCN _t	(3) UIC _t	C _{TRC}
1	541,408	1,974,419	-	2,515,827
2	-	-	-	-
3	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-
	541,408	1,974,419	-	2,515,827

8.810% Discount Rate

\$2,312,128 NPV

- PRC_t = Program administrator costs in year t
- PCN_t = Net participant costs
- UIC_t = Utility increased supply costs in year t

- (1) Scheduled per calculation performed for RIM Test
- (2) Represents net participant costs which is the incremental cost to the participant of purchasing a high-efficiency appliance versus one with standard efficiency. Amount scheduled from PC_t from the Participant Test.
- (3) No known increased supply costs as a result of operating the CEP



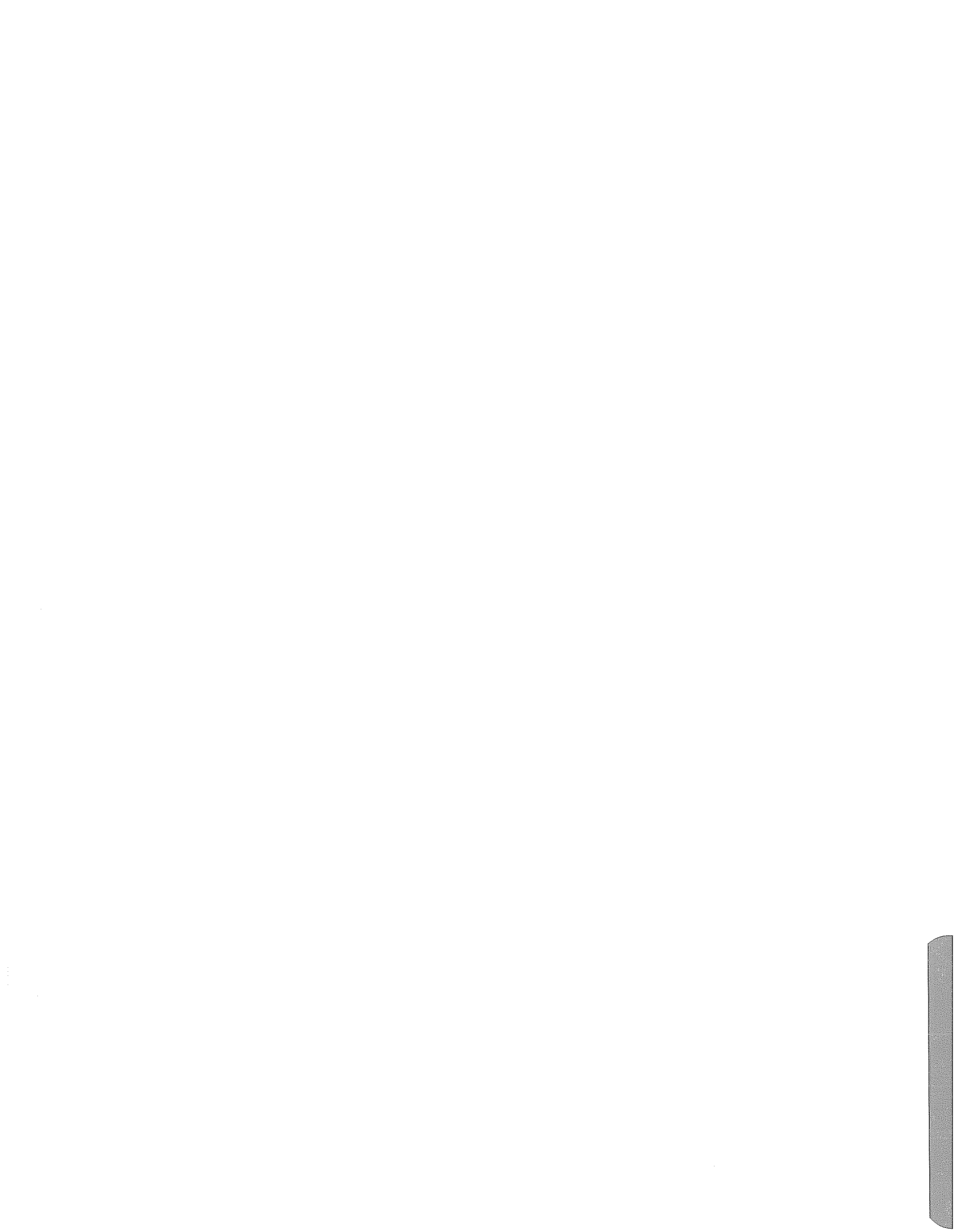
Atmos Energy Corporation
Staff's IC Follow-up Data Request Dated February 14, 2012
Case No. 2011-00395
Question No. 4
Witness: Mark A. Martin

REQUEST:

Refer to response 2. Should the DCRC = section of the Tariff still includes employee expenses in light of response 4, which states the employee salary costs were removed from DSM program costs?

RESPONSE:

All employee salary costs have been removed from the DSM application. Atmos will amend the tariff to remove the word "employees" from the tariff sheet.



Atmos Energy Corporation
Staff's IC Follow-up Data Request Dated February 14, 2012
Case No. 2011-00395
Question No. 5
Witness: Mark A. Martin

REQUEST:

Refer to response 2. Barring some other revision, should Twelfth Revised Sheet No. 41, show a DSM Incentive Adjustment amount of \$0.0020 as opposed to \$0.0150 per Mcf for residential customers?

RESPONSE:

No, several of the rates on the tariff sheet should change. The specific one mentioned here should actually be \$0.010/Mcf. The rates should tie to the "Billing Factor 2012" tab in the workbook or page 4. We also noticed on the referenced tab that the DBA (DSM Balancing Adjustment) under/(over) recovery amount used the dollars at the time of the initial filing and we now have more current numbers. The amount changed from (\$412,362.61) to (\$463,897.81). This correction, as well as, the errors found by the PSC in DRs 1-3 and corrected herein; have resulted in most of the tariff rates needing to change. Amended tariff sheets are attached hereto in response to DRs 4 and 5.

ATMOS ENERGY CORPORATION

Demand-Side Management Cost Recovery Mechanism	
DSM	
1. <u>Applicable</u>	<p>Applicable to Rate G-1 Sales Service, residential and commercial classes only. (T)</p> <p>The Distribution Charge under Residential and Commercial Rate G-1 Sales Service, shall be increased or decreased for nine annual periods beginning January 2012 and continuing through December 31, 2016 by the DSM Cost Recovery Component (DSMRC) at a rate per Mcf in accordance with the following formula: (T)</p> $\text{DSMRC} = \text{DCRC} + \text{DLSA} + \text{DIA} + \text{DBA} \quad (T)$ <p>Where:</p> <p>DCRC = DSM Cost Recovery-Current. The DCRC shall include all actual costs, direct and indirect, under this program which has been approved by the Commission. This includes all direct costs associated with the program including rebates paid under the program, the cost of educational supplies, and customer awareness related to conservation/efficiency. In addition, indirect costs shall include the costs of planning, developing, implementing, monitoring, and evaluating DSM programs. In addition, all costs incurred by or on behalf of the program, including but not limited to costs for consultants, and administrative expenses, will be recovered through the DCRC. (T)</p> <p>DLSA = DSM Lost Sales Adjustment. To effectively promote and execute the program, the Company shall recover the annual lost sales attributable to customer conservation/efficiency created as a result of the Program. This aligns the Company's interest with that of its customers by reducing the correlation between volume and revenue for those customers who elect to participate in the program. The lost sales are the estimated conservation, per participant, times the base rate for the applicable customer. The goal is to make the Company whole for promoting the program. Lost sales are based on the cumulative lost sales since the program inception and will reset when the Company completes a general rate case (N)</p>

ISSUED: September 26, 2011

EFFECTIVE: January 1, 2012

ISSUED BY: Mark A. Martin - Vice President of Rates & Regulatory Affairs, Kentucky/Mid-States Division

ATMOS ENERGY CORPORATION

Demand-Side Management Cost Recovery Mechanism	
DSM	
DIA =	DSM Incentive Adjustment. As a result of the program, the customers who participate in the program will save on their gas bills due to decreased usage, which results in decreased commodity charges. As an incentive for the Company to devote the necessary monetary and physical resources to promote and administer the program, the Company will earn a fifteen percent (15%) incentive based on the net resource savings of the Program participants. (N)
	Net resource savings are defined as Program benefits less utility Program costs and participant costs where Program benefits will be calculated on the basis of the present value of Atmos' avoided commodity costs over the expected life of the Program. For the purpose of calculating the Program benefits, a specific measure's life as defined in DEER (Database for Energy Efficient Resources), EnergyStar or NEEP is assumed with future gas costs over a corresponding period based on projection of the Company's Gas Cost Adjustment (GCA) at the time of filing with escalation factors determined by NYMEX futures prices on the cost of gas at Henry Hub. The present value is the weighted average cost of capital as stated in the Company's most recent rate case. (T)
DBA =	DSM Balance Adjustment. The DBA shall be calculated on a calendar year basis and be used to reconcile the difference between the amount of revenues actually billed through the DSMRC and the revenues which should have been billed. (T)
	The DBA for the upcoming twelve-month period shall be calculated as the sum of the balance adjustments for the DCRC, DLSA and DIA. For the DCRC, DLSA and DIA, the balance adjustment shall be the difference between the amount billed in a twelve-month period and the actual cost of the DSM Program during the same twelve-month period. (D)
	The balance adjustment amounts calculated will include interest to be calculated at a rate equal to the average of "3-month Commercial Paper Rate" for the immediately preceding twelve-month period.
	The Company will file modifications to the DSMRC on an annual basis at least two months prior to the beginning of the effective upcoming twelve-month period for billing. This annual filing shall include detailed calculations of the DCRC, DLSA, DIA and the DBA, as well as data on the total cost of the DSM Program over the twelve-month period. The calculations plus interest shall be divided by the expected Mcf sales for the upcoming twelve-month period to determine the DSMRC. (T)

ATMOS ENERGY CORPORATION

Demand-Side Management Cost Recovery Mechanism		
DSM		
<u>DSM Cost Recovery Component (DSMRC-R):</u>		(T)
DSM Cost Recovery – Current:	\$0.0940 per Mcf	(I)
DSM Lost Sales Adjustment	\$0.0040 per Mcf	(I)
DSM Incentive Adjustment	\$0.0100 per Mcf	(I)
DSM Balance Adjustment:	(<u>\$0.0440</u>) per Mcf	(I)
DSMRC Residential Rate G-1	\$0.0640 per Mcf	(I)
<u>DSM Cost Recovery Component (DSMRC-C):</u>		(N)
DSM Cost Recovery – Current:	\$0.0690 per Mcf	(N)
DSM Lost Sales Adjustment	\$0.0030 per Mcf	(N)
DSM Incentive Adjustment	\$0.0190 per Mcf	(N)
DSM Balance Adjustment:	(<u>\$0.0000</u>) per Mcf	(N)
DSMRC Commercial Rate G-1	\$0.0910 per Mcf	(N)

ISSUED: September 26, 2011

EFFECTIVE: January 1, 2012

BY: Mark A. Martin - Vice President of Rates & Regulatory Affairs, Kentucky/Mid-States Division