



## Utility Committee Meeting

### AGENDA

November 6, 2012

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#### I. CALL TO ORDER

#### II. MATTERS BEFORE COMMITTEE

1. [Discussion /Presentation - Meter Replacement](#)
2. [Discussion / Approval - MEAG Power Sale of Excess Reserve](#)
3. [Discussion - South Broad Street Lighting](#)

#### III. ADJOURN



## Utility Committee Meeting

### AGENDA

November 6, 2012

**Item:**

Discussion /Presentation - Meter Replacement

**Department:**

**Additional Information:**

**Financial Impact:**

**Budgeted Item:**

**Recommendation / Request:**

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Attachments / click to download

 [Meter Replacement Info](#)



# **The City of Monroe, Georgia**

## **Project Benefit Report**

Elster Automated Meter Reading  
Revised November 2012



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## Executive Summary

The findings of this report demonstrate that the feasibility of implementing a water meter based utility improvement project is exceptionally good. The means by which this may be structured are flexible. This type of project will generate the most benefit in the shortest period of time through a:

- Lease Purchase Turn Key Package (includes installation)

The total cost for the project requested is \$1,999,404.11 (\$1,817,640.10 equipment and installation and a 10% Contingency of \$181,764.01). The contingency fund would be used to make repairs for items discovered during the project. These items include bad curb stops, broken meter boxes, etc. This Contingency fund would be used for only city authorized repairs and any unspent funds at the end of the project would remain city funds to be used for legal purposes.

This infrastructure investment will yield substantial revenue benefits over the life of the project while enhancing customer service and reporting capabilities. The estimated benefits for this project with regard to the revenue enhancement are calculated to be approximately \$2,253,994 over the next 15 years. This benefit does not include any labor or process improvements, nor does this number include the net benefit in stopping the continued loss in revenue as meters continue to lose accuracy.

In determining what approach best meets the needs of the City, the HD Supply Waterworks team is here to work with you. We have put this approach together based on customer communication and feedback as to what type of system and approach the City has expressed a desire to achieve. Our goal is to keep you in an improved annual revenue position while allowing the system improvements to fund themselves through the revenue benefits they produce. We look forward to working with you on this project.

Thank you for your time and the opportunity to deliver these findings to you. HD Supply Waterworks is your partner for insuring success! Please contact HD Supply Waterworks with any questions or comments at the following:

*Jason Wakeman*

Jason Wakeman  
Metering Specialist  
Ph: 678-283-6681  
[Jason.Wakeman@hdsupply.com](mailto:Jason.Wakeman@hdsupply.com)

*Dewayne Self*

Dewayne Self  
SE Region Metering/AMI Manager  
Cell: 501-650-4526  
[Noel.self@hdsupply.com](mailto:Noel.self@hdsupply.com)

- *Price for installation based on no requirement for prevailing wage, does not include sales tax if applicable, does not include bonding cost if required.*



## Revenue Improvement Report

The following report was generated by HD Supply Waterworks. This report is based on information provided by The City of Monroe, Georgia. HD Supply Waterworks would like to thank The City of Monroe, Georgia for their courteous cooperation while generating this report.

All findings are directly based on analytical data provided by The City of Monroe, Georgia. The goal of this report is to demonstrate the feasibility of implementing an automated meter reading system and meter replacement program. This program will be completed as a conversion of existing water meters to new, accurate metering equipment. This innovative equipment will meet the standards that are set by the AWWA. Some of the key components of this approach are as follows:



- The city will actually create more positive water revenue than if they do nothing at all to the existing water utility system
- The newly recovered revenues will help pay for the project
- The City of Monroe, Georgia will no longer lose revenue through the inaccurate meters
- The project will be completely turn key to include a complete system wide change out of all water meters in the project and implementation of the reading equipment
- Increased metering accuracy and efficiency
- No more meter misreads
- Increased water conservation monitoring
- Increased water accountability and management

The ability to stop lost revenues through inaccurate meters is a reality. HD Supply Waterworks can deliver this project to the City. HD Supply Waterworks is here to insure The City of Monroe, Georgia experiences complete success with the highest caliber service and product offerings.



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## The City of Monroe, Georgia's Present System Condition



Presently, The City of Monroe, Georgia is experiencing an approximate 21.5% water loss annually. Over the last two years the city has observed an approximate 14 million gallon unaccounted for water each month. Annualized this equates to approximately 170million gallons of non-revenue each year. Not only does the city not receive revenue for non-revenue water it pays to treat and pump this water. For water that is lost due to metering inaccuracies the city also must pay to treat wastewater that it did not receive revenue for.

We realize that not all the non-revenue is the result of metering loss but may be the result of line breaks, flushing etc. For the purpose of this report we estimated that ½ of the lost water or are the result of metering inaccuracies or a 10% loss at the meter.

Below please find the non-revenue water as reported by the city

Mo/Yr	MG Pumped	MG Gals Sold	MG Lost	% L&U For	Mo/Yr	MG Pumped	MG Gals Sold	MG Lost	% L&U For
Jan-11	60.33	41.49	18.84	31.2%	Jan-12	53.53	45.41	8.12	15.16%
Feb-11	52.03	35.32	16.71	32.1%	Feb-12	50.90	39.98	10.92	21.45%
Mar-11	57.16	41.15	16.01	28.0%	Mar-12	56.87	41.15	15.72	27.64%
Apr-11	57.22	44.70	12.52	21.9%	Apr-12	61.56	44.70	16.86	27.39%
May-11	72.65	46.49	26.16	36.0%	May-12	70.83	51.34	19.49	27.52%
Jun-11	74.25	56.38	17.87	24.1%	Jun-12	72.73	54.21	18.52	25.47%
Jul-11	73.94	61.07	12.87	17.4%	Jul-12	75.43	60.29	15.14	20.07%
Aug-11	77.43	58.45	18.98	24.5%	Aug-12	71.68	58.86	12.82	17.89%
Sep-11	81.24	59.03	22.21	27.3%	Sep-12	67.08	56.20	10.88	16.22%
Oct-11	61.59	69.36	-7.77	-12.61%	Oct-12	68.81	52.16	16.65	24.2%
Nov-11	54.42	49.26	5.16	9.48%	Nov-12			0.00	
Dec-11	55.19	44.40	10.79	19.56%	Dec-12			0.00	
11 Avg	64.79	50.59	14.20	21.91%	12 Avg	63.25	49.83	14.22	21.42%
<b>Total</b>	<b>777.45</b>	<b>607.10</b>	<b>170.35</b>		<b>Total</b>	<b>751.81</b>	<b>667.32</b>	<b>161.07</b>	
						Averages are for last 12 Months			
						Totals are for last 12 Months			



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The following are some key findings factored over 15 years (which is the average life span of a water meter):

**If no Action is Taken**

- **Total lost consumption revenues over 15 years if no action is taken \$2,602,624.61**
- **Approximately lost annually if no action taken \$173,508.31**
- **The cost of treating, delivering, and distributing 1,166,175,000 gallons of water over the next 15 years without the ability to properly recover these costs (est. 77,745,000 gallons per year)**

**If The City of Monroe, Georgia Implements this Meter Project**

**If The City of Monroe, Georgia chooses to act on this project then they will see:**

- **A consumption revenue benefit over the next 15 years of \$2,253,994.08**
- **Approximately \$150,266.27 annually in new revenues over the next 15 years**

City of Monroe Georgia				
Net Benefits				
Baseline Revenues from Pre-Project Year:	<b>\$1,591,982.91</b>			
Annual Revenue Improvement	Annual Total Revenues	Total Price Annualized over Meter System Life	Annual Revenues Without Project	
Year 1	\$79,599.15	\$1,671,582.06	\$131,605.10	\$1,591,982.91
Year 2	\$158,672.94	\$1,750,655.85	\$131,605.10	\$1,564,123.21
Year 3	\$158,149.32	\$1,750,132.23	\$131,605.10	\$1,536,751.05
Year 4	\$157,627.42	\$1,749,610.33	\$131,605.10	\$1,509,857.91
Year 5	\$157,107.25	\$1,749,090.16	\$131,605.10	\$1,483,435.40
Year 6	\$156,588.80	\$1,748,571.71	\$131,605.10	\$1,457,475.28
Year 7	\$156,072.06	\$1,748,054.97	\$131,605.10	\$1,431,969.46
Year 8	\$155,557.02	\$1,747,539.93	\$131,605.10	\$1,406,909.99
Year 9	\$155,043.68	\$1,747,026.59	\$131,605.10	\$1,382,289.07
Year 10	\$154,532.04	\$1,746,514.95	\$131,605.10	\$1,358,099.01
Year 11	\$154,022.08	\$1,746,004.99	\$131,605.10	\$1,334,332.28
Year 12	\$153,513.81	\$1,745,496.72	\$131,605.10	\$1,310,981.46
Year 13	\$153,007.21	\$1,744,990.12	\$131,605.10	\$1,288,039.29
Year 14	\$152,502.29	\$1,744,485.20	\$131,605.10	\$1,265,498.60
Year 15	\$151,999.03	\$1,743,981.94	\$131,605.10	\$1,243,352.37
<b>Total Net Revenue Improvements:</b>	<b>\$2,253,994.08</b>		<b>Total Return on Investment</b>	<b>Total Net Loss of Revenues Without Project</b>
<b>ROI on Project In Years Purchased up Front:</b>	<b>13.1 years</b>		<b>\$2,253,994.08</b>	<b>\$2,602,624.61</b>

**Total New Consumption Revenues with Project: \$2,253,994.08**

**Total Net Loss of Consumption Revenues without Project: - \$2,602,624.61**



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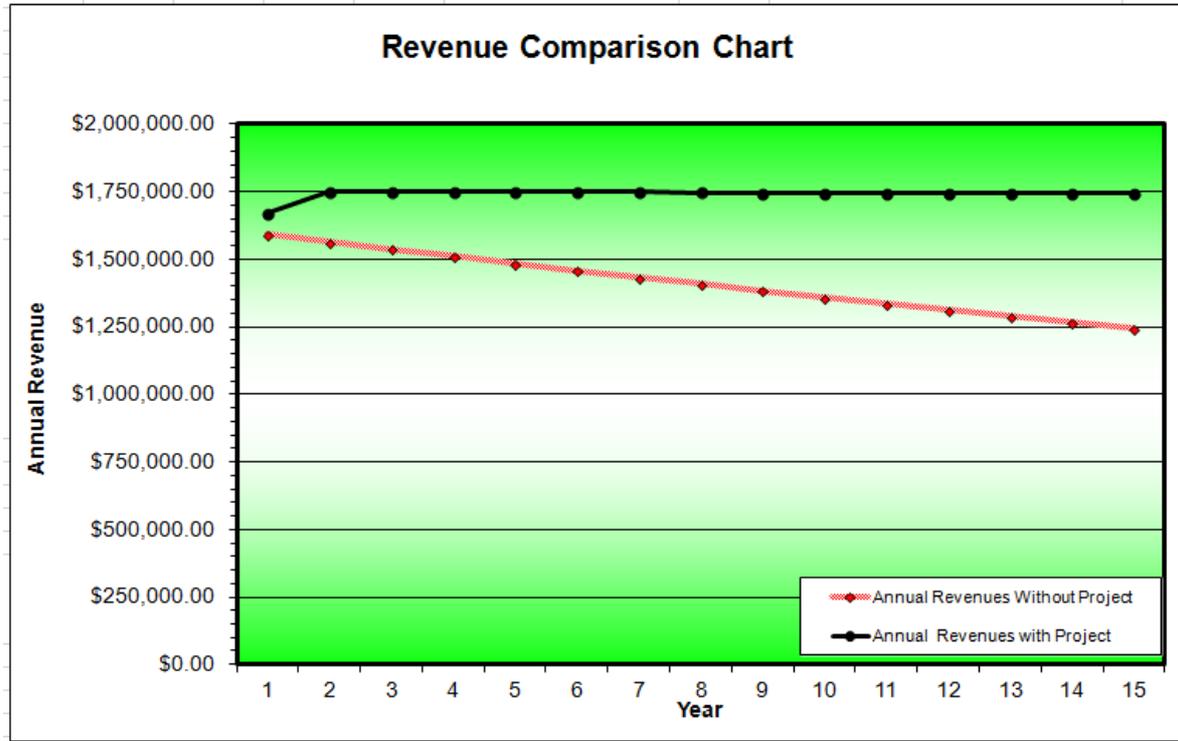
The above figures assume a six to nine month change out period for all water meter services. The new system will utilize an Elster Mobile Automated Meter Reading system. As inflation, fuel and energy costs, and increasing regulatory costs continue to increase, The City of Monroe, Georgia will be positioned to offer the highest caliber of water meter reading utilizing the most efficient and accurate technologies available. This will insure the highest accuracy of customer bills while accounting for the amount of cost The City of Monroe, Georgia incurs by providing these services.

Item	Quantity	Price	Total
5/8" X 1/2" Elster meter and transmitter	5873	\$ 159.97	\$ 939,503.81
5/8" Modification of old style crescent meter boxes	1500	129.35	\$ 194,025.00
5/8" X 1/2" Elster meter and transmitter (small commercial)	630	159.96	\$ 100,774.80
1" Elster meter and transmitter	70	201.52	\$ 14,106.40
1 1/2" Elster meter and transmitter	40	427.75	\$ 17,110.00
2" Elster meter and transmitter	86	1875.84	\$ 161,322.24
3" Elster meter and transmitter	1	2330.53	\$ 2,330.53
4" Elster meter and transmitter	1	2582.17	\$ 2,582.17
6" Elster meter and transmitter	1	4118.78	\$ 4,118.78
8" Elster meter and transmitter	1	6180.37	\$ 6,180.37
3" Sensus Register	6	575	\$ 3,450.00
4" Sensus Register	7	575	\$ 4,025.00
6" Sensus Register	9	575	\$ 5,175.00
8" Sensus Register	1	575	\$ 575.00
FC300 Handheld	4	5600	\$ 22,400.00
Install 5/8 x 1/2" meter	5873	\$ 35.00	\$ 205,555.00
Modification of old style crescent meter boxes Labor	1500	\$ 30.00	\$ 45,000.00
Install 5/8" X 1/2" small commercial meter	630	35	\$ 22,050.00
install 1" Elster meter and transmitter	70	43.5	\$ 3,045.00
Install 1 1/2" Elster meter and transmitter	40	400	\$ 16,000.00
Install 2" Elster meter and transmitter	86	400	\$ 34,400.00
Install 3" Elster meter and transmitter	1	515	\$ 515.00
Install 4" Elster meter and transmitter	1	515	\$ 515.00
Install 6" Elster meter and transmitter	1	1075	\$ 1,075.00
Install 8" Elster meter and transmitter	1	1300	\$ 1,300.00
Install 3" Sensus Register	6	22	\$ 132.00
Install 4" Sensus Register	7	22	\$ 154.00
Install 6" Sensus Register	9	22	\$ 198.00
Install 8" Sensus Register	1	22	\$ 22.00
Project Management	1	10000	\$ 10,000.00
		Subtotal	\$ 1,817,640.10
10% Contingency			\$ 181,764.01
		Total	\$ 1,999,404.11

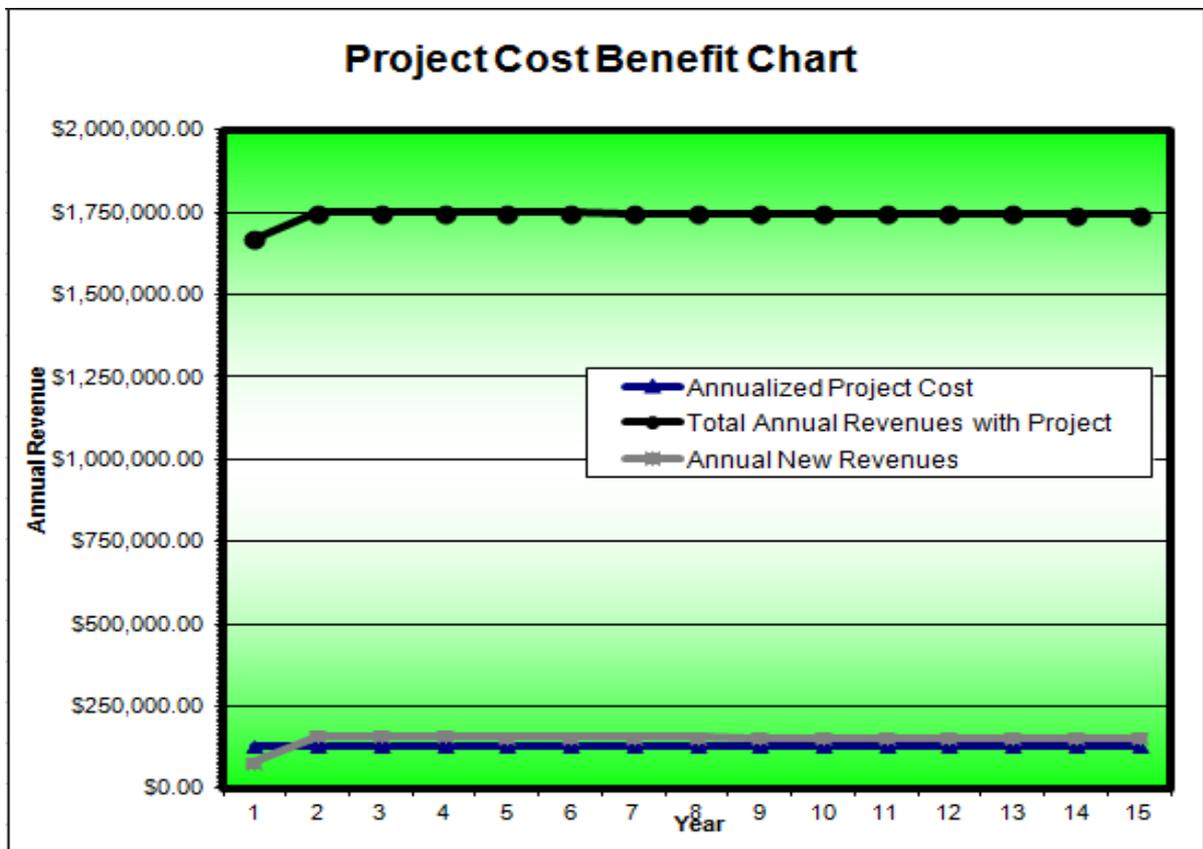
- See product bid for specifics, based on meter count as provided by the Customer standard terms and conditions apply



## Consumption Revenue Improvement Chart



## Project Cost Benefit Chart





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## **Additional Benefits**

In addition to the revenue benefits previously mentioned this project will provide other tangible benefits:

- Labor benefits – Implementing this project will allow the city to maximize the productivity of its existing labor force by freeing up personnel from meter reading tasks the utility will be able to shift personnel to maintenance functions
- Customer Service – Increased levels of customer service attributable to data logging and other increased information capabilities

## **Examination of the Turn-Key Installation Process**

HD Supply Waterworks wishes to take this opportunity to underscore the importance of the installation process to the success of the overall meter project. Changing the existing manual read meters to an automated meter process encompasses more than the physical act of changing the meter, it includes data management, programming, and material management. Our proposal is to provide a project in timely and methodical manner. When considering our turn-key proposal, please consider that installation and project management includes the following:

- Data Management – In changing out the meters many items of data must be recorded and delivered to the Utility, the meter reading for the existing meter, the serial number for the new meter, serial number for the electronic register, serial number for the transmitter, date and time of the installation, etc. HD Supply waterworks proposal provides all of the above data in an electronic format to then be used by the utility. By bringing this data in an electronic format the utility billing office can avoid the work associated with manual entry, and reduce transposition and typing errors associated with re-entering this data
- Project Management – HD Supply Waterworks will serve as project manager in order to manage its installation crews, ensure they are performing tasks according to factory specifications and work to manage the project in order to provide as smooth of a transformation as possible
- Meter change out – Our Crews will work to change the meters out in a quick and methodical manner. By providing full-time dedicated crews we will ensure that the process is completed in a timely fashion. During the meter change out, the crews will not only change out the meters with new meters but will program the Mobile transmitters in order to obtain optimal performance from the system.
- GPS Geo-coding – During the installation process our crews will obtain a GPS coordinate for each meter. This can be a great tool for inventory management and as crews do not physically visit each meter each month, this tool can provide a great tool for locating the meter in the coming years
  - Seamless integration – by purchasing the system and installation from one source, the customer has one point of contact for warranty and customer service issues. HD Supply Waterworks stands ready to guarantee that the system will operate properly in the coming years. If the system fails to operate the utility will avoid trying to determine if it is a warranty issue or an installation problem.



## Utility Committee Meeting

### AGENDA

November 6, 2012

**Item:**

Discussion / Approval - MEAG Power Sale of Excess Reserve

**Department:**

**Additional Information:**

**Financial Impact:**

**Budgeted Item:**

**Recommendation / Request:**

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

[MEAG Power Sales Info](#)

October 24, 2012

City of Monroe, Georgia  
Attn: The Honorable Greg Thompson, Mayor  
215 North Broad Street  
Monroe, GA 30655

City of Forsyth, Georgia  
Attn: The Honorable John T. Howard, II, Mayor  
26 North Jackson Street  
Forsyth, GA 31029

**Re: MEAG Power Sale of Excess Reserve Capacity to the City of Forsyth  
on Behalf of the City of Monroe**

Dear Mayor Thompson and Mayor Howard:

This Letter Agreement sets forth the agreement between the Municipal Electric Authority of Georgia ("MEAG Power"), the City of Monroe, Georgia ("Monroe"), and the City of Forsyth, Georgia ("Forsyth") for MEAG Power's sale on behalf of Monroe of certain excess reserve capacity to Forsyth pursuant to Section 312 of the Power Sales Contract between MEAG Power and Monroe. MEAG Power is willing to facilitate and execute this transaction pursuant to Section 312, subject to this Letter Agreement.

The capitalized words or terms that are used in this Letter Agreement, but are not defined herein, shall have the same meanings as assigned to them in the Power Sales Contract.

In consideration of the mutual agreements set forth herein, the sufficiency and adequacy of which are acknowledged by MEAG Power, Monroe and Forsyth, it is understood and agreed that:

**(1) Sale of Excess Reserve Capacity by MEAG Power on Behalf of Monroe.**

(a) Pursuant to Section 312 of the Power Sales Contract between MEAG Power and Monroe, Monroe has declared capacity in the amount of 1,431 kW, as measured at B1, of the total kW of its Project One Entitlement Share (the "Sales Amount") to be excess to its needs. Monroe has requested MEAG Power to sell, and MEAG Power shall, in accordance with this Letter Agreement, sell this capacity, but no energy associated therewith, to Forsyth.

(b) This Sale Amount shall not reduce Monroe's Entitlement Share of output and services under the Power Sales Contract and Monroe shall remain liable to MEAG Power for its entire Entitlement Share. All payments received by MEAG Power from Forsyth for the Sale Amount pursuant to this Letter Agreement shall be credited to Monroe's obligation to MEAG Power to pay for its Entitlement Share.

(2) **Purchase of Excess Reserve Capacity by Forsyth.** Forsyth agrees to purchase the Sale Amount for a price of \$3.88 per kW-year (the "Contract Price"). MEAG Power shall bill Forsyth for such amount and Forsyth shall pay all amounts due in the same manner as other payments under the Power Sales Contract between MEAG Power and Forsyth.

(3) **Costs.** Monroe shall be obligated for all costs incurred by MEAG Power as a direct result of the transaction identified in this Letter Agreement. MEAG Power agrees to provide sufficient documentation to Monroe to enable it to verify any such costs.

(4) **Indemnification.** Monroe hereby indemnifies and holds MEAG Power and the remaining MEAG Power Participants harmless from and against any and all losses, costs, liabilities, damages, expenses (including without limitation attorneys' fees and expenses) of any kind and incurred or suffered by MEAG Power or its Participants as a result of, or in connection with, Monroe's sale of excess reserve capacity pursuant to this Letter Agreement.

(5) **Term.** The initial term of the sale of Monroe's excess reserve capacity to Forsyth pursuant to this Letter Agreement shall begin at 0000 hours on January 1, 2013 and end at 2400 hours on December 31, 2013, and until all obligations under this Letter Agreement are satisfied, including, but not limited to, Monroe's obligation to indemnify MEAG Power and the Participants. All times referenced herein are Central Prevailing Time.

(6) **Termination and Unwind.** If MEAG Power changes its policy concerning the computation of necessary reserve capacity from a "budgeted coincident peaks" standard to an "actual peaks" standard and such policy change goes into effect during the Term of this Letter Agreement, Monroe and Forsyth shall be returned to their respective positions as if this Letter Agreement had not been entered into (e.g., Forsyth shall receive a credit for amounts it paid pursuant to this Letter Agreement and Monroe shall be billed for all such amounts). Subsequently, this Letter Agreement shall terminate, except that Sections (3) and (4) shall remain effective.

If you are in agreement with the foregoing and after this Letter Agreement has been duly authorized by the respective governing bodies of Monroe and Forsyth, please execute this Letter Agreement in the space provided below.

**MUNICIPAL ELECTRIC AUTHORITY OF  
GEORGIA**

ATTEST:

\_\_\_\_\_

By: \_\_\_\_\_  
Robert P. Johnston  
President and Chief Executive Officer

[SIGNATURES CONTINUED ON NEXT PAGE]

Agreed to and accepted, this \_\_\_\_ day  
of \_\_\_\_\_, 2012.

**CITY OF MONROE**

By: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
City Clerk

[SEAL]

Agreed to and accepted, this \_\_\_\_ day  
of \_\_\_\_\_, 2012.

**CITY OF FORSYTH**

By: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
City Clerk

[SEAL]



## Utility Committee Meeting

### AGENDA

November 6, 2012

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Discussion - South Broad Street Lighting

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