

Model Version 0797.A, Rev 1/04/13

# MERC -- Project Feasibility - 2014 Interim Rates

[Trade secret data begins...

Project Name **Fayal Township - Test Base Case for O&M Impact**

Note: Inputs @ >>> (yellow)

Year 1      Year 2      Year 3      Year 4      Year 5      Year 6      Year 7      Year 8      Year 9

**Residential Customer/Usage**

Projected # of Incremental Customers	>>>	[Redacted]								
Total Resid Customers Per Project		[Redacted]								
Per Avg Customer MCF/Kwh Usage	>>>	[Redacted]								
Margin per MCF/Kwh	>>>	[Redacted]								
Monthly Customer Charge	>>>	[Redacted]								

**Commercial Customer/Usage**

Projected # of Incremental Customers	>>>	[Redacted]								
Total Coml Customers Accumulated		[Redacted]								
Per Avg Customer MCF/Kwh Usage	>>>	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]	[Redacted]
Margin per MCF/Kwh	>>>	[Redacted]								
Monthly Customer Charge	>>>	[Redacted]								

**Capital Investment**

From Customer Estimate Form		[Redacted]								
OR Enter Below		[Redacted]								
Infrastructure Cost -- Mains, Other	>>>	[Redacted]								
Cost per Resid Cust -- Services	>>>	[Redacted]								
Cost per Coml Cust -- Services	>>>	[Redacted]								
Customer Contribution (if required, from page 2)		[Redacted]								

**Other Costs**

Cost per Resid Customer (e.g. Incentives)	>>>	[Redacted]								
Cost per Coml Customer (e.g. Incentives)	>>>	[Redacted]								
Cust Acquisition Costs-Direct "Fixed"	>>>	[Redacted] ...TRADE SECRET DATA ENI								

[TRADE SECRET DATA BEGINS...

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## Output Screen

Project Name Fayal Township - Test Base Case for O&M Impact

Calculations from Input Screen (User Input) & Support Screen (Static Formulas Provided)

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>	<u>Year 7</u>	<u>Year 8</u>	<u>Year 9</u>
<b>CASH IN</b>									
Projected Margins from Residential									
Projected Margins from Commercial									
Total Margins From Project									
<b>CASH OUT</b>									
Total Incremental Investment by Year									
Total Net Project Investment									
Total Other Costs Incurred (Var&Fixed)									

<b>PROFITABILITY CHECKS</b>		<b>calculated</b>	<b>TOTAL PROJECT</b>	
(A)	NPV @ 10 Yrs with Residual		Must be Greater than Zero	
	NPV @ 10 Yrs w/o Residual		\$ -	Var Reference Only
	NPV @ 20 Yrs w/o Residual		\$ -	Var Reference Only
(B)	<b>Average ROE @ 5 Yrs</b>		Must be Greater than	
	Avg Return on Equity @ 10 Yrs		Reference Only	

Required Customer Contribution to Meet ROE Feasibility for First 5 Years Average

Go to Cell H67; Use Goal Seek under Tools (set h67 to Zero by changing e69)  (approximate value on first run, if negative then ROE > Target)

Contribution must be at least \$1 less than Cur Yr Investment, else ERROR will show

Amounts from this line transferred to Input Screen	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Multiple Years will require more reruns of Goal Se	Year 1	Year 2	Year 3	Year 4	Year 5

>>> Project Margins Allocated  Applied to Embedded System/Infrastructure Cost

>>> Contract Length

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[TRADE SECRET DATA BEGINS...

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## Support Screen

Project Name Fayal Township - Test Base Case for O&M Impact

Targeted MERC Discount Rate **Gas @((50% x 9.7%) + ((50% x 6.28%) x (1 - tax rate)))=6.70%**  
 Effective Income Tax Rate (35% Federal & 7% State)  
 Statutory Income Tax Rate (35% Federal & 7% State)  
 Selected Deprec Rate, by default or contract (48.3 year life estimated, unless contract length specified)  
 Property Tax/Insur Rate  
 Equity as a Percent of Capital  
 LongTerm Debt as a Percent of Capital  
 Weighted Cost of LTDebt @ 6.28%  
 Cash Car Chg (Ptax-IncTx-(Dep\*IncTx))

Accumulated # Resid Customers from pg 1  
 Accumulated Resid Usage Volumes from pg 1  
 Accumulated # Coml Customers from pg 1  
 Accumulated Coml Usage Volumes from pg 1

Calculated from Pages 1&2 and Support Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9

**Cash FLOW**

Less Contribution to System Cust 0%  
 Less Inc Tax on Net Margins

CASH IN COMING Sum +pg 2

Less Inc Tax on Cust Acq Costs  
 Add Net Cash Carrying Charges

CASH OUT GOING Sum +pg 2

Cash NET of Project (w/residual value in yr 10)

Cash NET of Project (w/o residual value)

**Book Checks**

Projected Running Gross Plant In Service  
 Projected Running Net Plant in Service

Projected Avg Common Equity Balance

first 5 yrs >>

Operating Book Income  
 Less Depreciation Expense  
 Less Carrying Costs (Interest & P-Tax)  
 Less Statutory Income Tax

NET Income Available for Shareholders

first 5 yrs >>

**RETURN ON EQUITY**

**APPROVAL**

CIAC Amount

\$ -

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

Date: \_\_\_\_\_

**COMMENTS**

Please describe all special or unusual situations connected to this project, the calculation of the feasibility or the collection of the required CIAC. Also include any information that determine the customer connection projection if different than the developer provided.

... TRADE SECRET DATA ENDS]

[Redacted]

[Redacted]

Year 10

[Redacted]

[Redacted]

[Redacted]

[Redacted]

DS]



Year 10



DS]

[Redacted]

[Redacted]

Year 10

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

on used to

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

<b>MERC Rates-effective January 2013</b>			
Customer Class of Service	Customer Charge	Margin per Mcf	Demand Charge per Mcf
Residential	\$ 9.59	\$ 2.22904	
Commercial Firm:			
Annual Usage <150 Mcf	\$ 16.36	\$ 2.09059	
Annual Usage >150 Mcf	\$ 39.49	\$ 1.90339	

Commercial Load Addition

Area

District

New Construction - New Meter

Conversion to Gas - Present Customer

District Code

Conversion to Gas - New Meter

Add Use - Present Customer

Customer Name Address Town State Zip

Account Number Type of Business SIC Code Normal Business Hours Hrs/Day Day/Wk Day/Yr

Natural Gas Load Added on This Report: A = Add on Load C = Conversion to Gas N = New Gas Equipment

Table for Heating (Circle) with columns: Heating (Circle), No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, 10 H/D, Heat Factor, MCF/YR.

Table for Water Heating (Circle) with columns: Water Heating (Circle), No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, Hr/Day, D/Yr, MCF/YR.

Table for Cooking (Circle) with columns: Cooking (Circle), Type of Equip., No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, Hr/Day, D/Yr, MCF/YR.

Table for Clothes Drying (Circle) with columns: Clothes Drying (Circle), No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, Hr/Day, D/Yr, MCF/YR.

Table for Grain Drying (Circle) with columns: Grain Drying (Circle), No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, 10 H/D, 14 D/Yr Factor, MCF/YR.

Table for Other (Circle) with columns: Other (Circle), Type of Equip., No. of Units, Input BTUH, Total BTUH Installed, Total Input 1,000,000, Hr/Day, D/Yr, MCF/YR.

Grand Total

Comments:

Reported By Date