BILLING ANALYSIS - DECLINING BLOCK RATES

INSTRUCTIONS

The billing analysis is the chart reflecting the usage by the customers as well as the revenue generated by a specific level of rates. A billing analysis of both the current and proposed rates is mandatory for analysis of this rate filing. The following is a step-by-step description which may be used to complete the billing analysis. A completed sample of a billing analysis is also included. Although the sample reflects water usage, it is equally applicable for gas companies using declining block rate design. This billing analysis is not intended for companies using a flat rate design.

a. Usage Table (Usage by Rate Increment)

Information needed to complete the usage table should be obtained from the meter books or other available usage records. The usage table is used to spread total usage into the proper incremental rate step.

Column No. 1 is the incremental steps in the present or proposed rate schedule for which the analysis is being made. Column No. 2 is the number of bills in each incremental rate step. Column No. 3 is the total gallons used in each incremental rate step. Column Nos. 4, 5, 6, 7, 8, and 9 are labeled to correspond to the incremental rate steps shown in Column No. 1 and contain the actual number of gallons used in each incremental rate step.

Example for completing Usage Table is as follows:

Column No. 1 is incremental rate steps.

Columns numbered 2 and 3 are completed by using information obtained from usage records.

Columns numbered 4, 5, 6, 7, 8, and 9 are completed by the following steps:

Step 1: 1st 2,000 gallons minimum bill rate level

432 Bills

518,400 gallons used

All bills use 2,000 gallons or less, therefore, all usage is recorded in Column 4.

Step 2: Next 3,000 gallons rate level

1,735 Bills

4,858,000 gallons used

1st 2,000 minimum x 1,735 bills = 3,470,000 gallons - record in Column 4.

Next 3,000 gallons - remainder of water over 2,000 = 1,388,000 gallons - record in Column 5.
Step 3:  Next 10,000 gallons rate level
1,830 Bills
16,268,700 gallons used
$1^{st}$ 2,000 minimum x 1,830 bills = 3,660,000 gallons - record in Column 4.
Next 3,000 gallons x 1,830 bills = 5,490,000 gallons - record in Column 5.
Next 10,000 gallons - remainder of water over 3,000 = 7,118,700 gallons - record in Column 6.

Step 4:  Next 25,000 gallons rate level
650 Bills
15,275,000 gallons used
$1^{st}$ 2,000 minimum x 650 bills = 1,300,000 gallons - record in Column 4.
Next 3,000 gallons x 650 bills = 1,950,000 gallons - record in Column 5.
Next 10,000 gallons x 650 bills = 6,500,000 gallons - record in Column 6.
Next 25,000 gallons - remainder of water over 10,000 = 5,525,000 gallons - record in Column 7.

Step 5:  Over 40,000 gallons rate level
153 Bills
9,975,600 gallons used
$1^{st}$ 2,000 minimum x 153 bills = 306,000 gallons - record in Column 4.
Next 3,000 gallons x 153 bills = 459,000 gallons - record in Column 5.
Next 10,000 gallons x 153 bills = 1,530,000 gallons - record in Column 6.
Next 25,000 gallons x 153 bills = 3,825,000 gallons - record in Column 7.
Over 40,000 gallons - remainder of water over 25,000 = 3,855,600 gallons - record in Column 8.

Step 6:  Total each column for transfer to Revenue Table.

b. Revenue Table (Revenue by Rate Increment)
The Revenue Table is used to determine the revenue produced from the Usage Table. Column No. 1 is the incremental rate steps in the rate schedule for which the analysis is being made. Column No. 2 indicates the total number of bills. Column No. 3 is the number of gallons accumulated in each rate increment (Totals from Columns 4, 5, 6, 7, and 8 of the above usage table). Column No. 4 is the rates to be used in determining revenue. Column No. 5 contains the revenue produced.
Revenue from Present/Proposed Rates
Test Period from _01-01-XX_ to _12-31-XX_

**USAGE TABLE**
Usage by Rate Increment

<table>
<thead>
<tr>
<th>Class: Residential</th>
<th>(1) Bills</th>
<th>(2) Gallons/Mcf</th>
<th>(3) First 2,000</th>
<th>(4) Next 3,000</th>
<th>(5) Next 10,000</th>
<th>(6) Next 25,000</th>
<th>(7) Over 40,000</th>
<th>(8) Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 2,000 Minimum Bill</td>
<td>432</td>
<td>518,400</td>
<td>518,400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>518,400</td>
</tr>
<tr>
<td>Next 3,000 Gallons</td>
<td>1,735</td>
<td>4,858,000</td>
<td>3,470,000</td>
<td>1,388,000</td>
<td></td>
<td></td>
<td></td>
<td>4,858,000</td>
</tr>
<tr>
<td>Next 10,000 Gallons</td>
<td>1,830</td>
<td>16,268,700</td>
<td>3,660,000</td>
<td>5,490,000</td>
<td>7,118,700</td>
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<td></td>
<td>16,268,700</td>
</tr>
<tr>
<td>Next 25,000 Gallons</td>
<td>650</td>
<td>15,275,000</td>
<td>1,300,000</td>
<td>1,950,000</td>
<td>6,500,000</td>
<td>5,525,000</td>
<td></td>
<td>15,275,000</td>
</tr>
<tr>
<td>Over 40,000 Gallons</td>
<td>153</td>
<td>9,975,600</td>
<td>306,000</td>
<td>459,000</td>
<td>1,530,000</td>
<td>3,825,000</td>
<td>3,855,600</td>
<td>9,975,600</td>
</tr>
<tr>
<td>Totals</td>
<td>4,800</td>
<td>46,895,700</td>
<td>9,254,400</td>
<td>9,287,000</td>
<td>15,148,700</td>
<td>9,350,000</td>
<td>3,855,600</td>
<td>46,895,700</td>
</tr>
</tbody>
</table>

**REVENUE TABLE**
Revenue by Rate Increment

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2) Bills</th>
<th>(3) Gallons/Mcf</th>
<th>(4) Rates</th>
<th>(5) Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 2,000 Minimum Bill</td>
<td>4,800</td>
<td>9,254,400</td>
<td>$5.00 Minimum Bill</td>
<td>$24,000.00</td>
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<tr>
<td>Next 3,000 Gallons</td>
<td>9,287,000</td>
<td>$2.50 per 1,000 Gal.</td>
<td>$23,217.00</td>
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<tr>
<td>Next 10,000 Gallons</td>
<td>15,148,700</td>
<td>$2.00 per 1,000 Gal.</td>
<td>$30,297.40</td>
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<tr>
<td>Next 25,000 Gallons</td>
<td>9,350,000</td>
<td>$1.25 per 1,000 Gal.</td>
<td>$11,687.50</td>
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<tr>
<td>Over 40,000 Gallons</td>
<td>3,855,600</td>
<td>$0.75 per 1,000 Gal.</td>
<td>$2,891.70</td>
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<tr>
<td>Totals</td>
<td>4,800</td>
<td>46,895,700</td>
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<td>$92,094.10</td>
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</tbody>
</table>

Instructions for Completing Revenue Table:

(9) Complete Columns No. 1, 2, and 3 using information from Usage Tables.
(10) Complete Column No. 4 using rates either present or proposed.
(11) Column No. 5 is completed by first multiplying the bills times the minimum charge. Then, starting with the second rate increment, multiply Column No. 3 by Column No. 4 and total.
Revenue from Present/Proposed Rates  
Test Period from _01-01_-_ to _12-31_-__

**USAGE TABLE**  
*Usage by Rate Increment*

**Class:** ______________

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
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</table>

**Totals**

**REVENUE TABLE**  
*Revenue by Rate Increment*

<table>
<thead>
<tr>
<th>(1)</th>
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**Totals**

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