

7.5.1 Portfolio Rate Impacts

Rate impacts for DSM programs are typically derived by calculating the net change in revenues that occur as a result of the DSM program. This impact can then be expressed on a per dollar or percentage basis. For the following assessment net revenue impact stemming from DSM investment is defined as the difference between the after-tax discounted avoided gas costs (benefit) and the sum of the discounted revenue losses and utility program costs (costs). Thus,

$$\text{Revenue Impact} = \text{NPV Avoided Gas Costs} - \text{NPV}(\text{Gas Revenue Losses} + \text{Utility Program Costs})$$

For the 1999 DSM Plan, the rate impact was calculated using outputs from the DSStrategist model to bring it as consistent as possible with the method used by Consumers Gas. For the calculation, Union used projected rates for the test year which incorporate impacts from DSM activities in previous years. Table 7.1 below, shows the average impact for a residential, commercial and industrial end-use consumers as a result of the 1999 energy efficiency marketing activities. These are incremental to impacts from previous years.

Table 7.1  
 One Year and Five Year Rate Impacts of 1999 DSM Plan

Average Customer in different markets	West & Central				North & East			
	1 Year Rate Impact \$/103m3	5 year Rate Impact \$/103m3	1 Year Rate Impact %	5 Year Rate Impact %	1 Year Rate Impact \$/103m3	5 year Rate Impact \$/103m3	1 Year Rate Impact %	5 Year Rate Impact %
Residential	0.17	0.67	0.07%	0.30%	0.22	0.85	0.10%	0.39%
Commercial	0.21	0.82	0.14%	0.53%	0.17	0.61	0.17%	0.31%
Industrial	0.15	0.62	0.11%	0.46%	0.13	0.52	0.13%	0.64%
Total	0.17	0.69	0.10%	0.38%	0.15	0.61	0.15%	0.51%

Table III-10 shows the results of all the various cost-effectiveness tests for the 2000 Budget Year. Note that these results include the portfolio administration charges not associated with any given program.

ii) Resource Impacts

The resource impacts are provided in Table III-9. For the proposed plan, the cumulative savings from all DSM programs over the life of the programs are 3,303  $10^6 \text{m}^3$ . In addition, water savings over the same period are 240,749 million litres and electricity savings are 679 GW.h.

iii) Bill and Rate Impacts

The results of the rate impact analysis indicate that a 0.33% upward impact on year 2000 rates and a 0.03% average rate impact over the life of the measures will occur as a result of the 2000 Budget year program activity. This upward pressure is inherent in conservation-type DSM programs, which reduce system sales volumes over which the company collects its distribution margin. As indicated, this upward pressure is relatively small and is not considered undue. The overall benefits in terms of avoided costs, participant bill reductions and positive environmental impacts are large enough to justify the small upward pressure in rates.