Incremental Demand-Side Management: Activities & Impacts

OVERVIEW

There are many different ways in which to address the question of choosing the best level of demand-side management (DSM). One way is to compare the incremental cost of DSM to that of supply side resources.

Table 1 lays out a high-level description of what the incremental change in activities is in moving from one level of DSM to the next, and presents some preliminary numbers regarding the incremental costs of the DSM options. This will be useful background to a more detailed discussion of portfolio analysis results and how these DSM results compare to competing supply-side resources.

OTHER RELEVANT MATERIALS

IRP TAC Meeting #2 – Demand-Side Management Options (Presented by John Duffy)

PURPOSE

Part of the discussion regarding choosing an optimal level of DSM spending within this IRP will consider the incremental impacts of DSM. This summary brief lays out what the change of activities are in moving from one level of DSM to the next and ties these changes in activities to incremental costs.

Table 1: Incremental Change In Activities And Costs Across DSM Options

	Changes	Average Levelized Cost	Incremental Levelized Cost	Factors behind incremental cost
Option 1		$40/MWh		
Option 1 -> 2	• Higher program activity (~ 33%) • Rate structures and codes & standards remain the same		$61/MWh	• TRC costs increase by 16%, while energy savings only increase by 9%. • Additional activity comes from programs, which are more costly than rates or codes and standards.
Option 2		$42/MWh		
Option 2 -> 3	• Programs scaled up to limit of cost-effectiveness • Rate structures and codes & standards remain the same		$94/MWh	• TRC costs increase by 18%, while energy savings only increase by 7%. • Additional activity is driven by programs climbing the cost curve.
Option 3		$46/MWh		
Option 3 -> 4	• Additional codes and standards • Additional market & societal tactics • Some programs scaled back later in time • Rate structures remain mostly the same		$137/MWh	• TRC costs increase by 24%, energy savings by 8%. • This option starts to target legislation for more expensive technologies, and increases spend on market & societal tactics
Option 4		$51/MWh		