2009 CARIS Potential Generic Solution
Demand Response
Order of Magnitude Unit Costs

(Estimates should not be assumed reflective or predictive of actual project costs)

Item #	Demand Response Block Size (MW)	Portfolio Type	Location	Unit Cost ($M/MW)	Total Portfolio Cost ($M)
D-1 High	100	Energy Efficiency	Upstate	$4.2	$420
D-1 Mid	100	Energy Efficiency	Upstate	$2.8	$280
D-1 Low	100	Energy Efficiency	Upstate	$1.4	$140
D-2 High	100	Demand Response	Upstate	$1.6	$158
D-2 Mid	100	Demand Response	Upstate	$1.1	$105
D-2 Low	100	Demand Response	Upstate	$0.5	$53
D-3 High	100	Energy Efficiency	Downstate	$5.7	$570
D-3 Mid	100	Energy Efficiency	Downstate	$3.8	$380
D-3 Low	100	Energy Efficiency	Downstate	$1.9	$190
D-4 High	100	Demand Response	Downstate	$2.1	$210
D-4 Mid	100	Demand Response	Downstate	$1.4	$140
D-4 Low	100	Demand Response	Downstate	$0.7	$70
D-5 High	100	Energy Efficiency	Long Island	$3.9	$390
D-5 Mid	100	Energy Efficiency	Long Island	$2.6	$260
D-5 Low	100	Energy Efficiency	Long Island	$1.3	$130
D-6 High	100	Demand Response	Long Island	$2.7	$270
D-6 Mid	100	Demand Response	Long Island	$1.8	$180
D-6 Low	100	Demand Response	Long Island	$0.9	$90

Assumptions

1. ***Estimates herein should not be utilized for purposes outside of the CARIS process. Also, these estimates should not be assumed as reflective or predictive of actual projects or imply that facilities can necessarily be built for these generic solution order of magnitude estimates. Estimate ranges were identified after Transmission Owner input and reaching consensus at the ESPWG.***

2. Costs are based on representative NY utilities' Demand Side Management filings.

3. Expected peak demand impact was used to scale the present value of the total portfolio budget to produce 100MW peak reduction.

4. Costs from each portfolio are based on 10 years of peak demand reduction.

5. Cost estimation is developed by dividing each year's cost by the peak demand reduction for that year and then calculating the present value of the $/MW over a 10 year period.

6. The range is derived from the utility filings as the "Low" and the "Mid" and "High" represents 2 and 3 times the "Low", respectively.

7. Due to a lack of Demand Response filing data for Upstate, it is assumed that the Upstate costs will be 75% of the Downstate costs. This is representative of the cost difference between to the Energy Efficiency programs for the two areas.