Print Form

New Jersey Energy Master Plan

Strategy Template

2005-2020

Instructions

Use this document as a template for providing suggestions on strategies/actions for specific objectives provided in **Section 2: Goals, Objectives, and** *Performance Measures. Using this page as an instruction guide, fill in the blank tables for each recommended strategy separately and email it to* energymasterplan@bpu.state.nj.us

Objective

List the objective from **Section 2: Goals, Objectives, and Performance Measures** for which the strategy is submitted. .

Strategy

Provide a description of the actions needed to achieve the objective.

Responsible Party

Provide the name(s) of the agency or organization responsible for the implementation of the strategy.

Timeline of action

List the incremental timeline of action for each strategy up to 2020.

Strategy outcome

List the expected incremental outcome(s) (results) of the strategy up to 2020.

Implementation cost

Provide the implementation cost.

Source of Funding

Provide source of funding to implement the strategy.

Indicators

List the suggested indicator(s) proposed to measure performance. Provide the data source of the indicator(s)

A. Current state of indicator

List the current value of the indicator

B. Indicator Projection to 2020

Provide projected value of the indicator by 2020 to meet the expected outcome.

SUBMITTED BY			
Name of Organization	Comverge, Inc.		
Mailing Address	120 Eagle Rock Ave, Suite 190 E. Hanover, NJ 07936		
Contact Name:	Paul Heitmann	Telephone #:	(973) 947-6051
		E-mail address:	pheitmann@comverge.com

Objective

Building new demand response infrastructure is not being driven by the wholesale market itself, and we suggest that NJ BPU strongly encourages 3rd party participation and investment, toward the MADRI recommendations . Goal is to incent third parties to modernize and automate program operation and M&V procedures. By creating retail benefits and improving grid reliability, T&D benefits and provides incentive for utilities to participate. Enabling critical peak pricing would incent participants to scale back usage during high demand peaks.

Strategy

Drive a Ten year PSE&G contract to third party ; - 3rd Party would pay PSE&G a fee ($5-10M) in return for rights to operate ACLM system and use existing marketing collateral. 3rd Party would replace non-working points with new, state-of-the-art, web programmable smart thermostats. 3rd Party would install comprehensive M & V system, and payment to 3rd party for O&M services tied directly to verified MW reductions ($35/kW-yr)

Responsible Party

PSEG would drive the competitive RFP process for involving third party bidders, and would evaluate the responses using economic impact models. NJ BPU works closely to monitor achieved time-frames. Comverge plans to bid to provide the program design, hardware installation, system operation, and measurement and verification (M&V). IBEW or other NJ workforce entities could be employed by third party to provide the installation and maintenance labor.

Timeline of action

1/1/2007 - State to complete review of MADRI findings, and validation of strategy.
3/2007 - PSE&G Completes Review of Legacy ACLM system with BPU; makes recommendations
5/31/2007 - Award contract for implementing DR program rebuilding.
12/2007 - Goal of 100MW under configuration management and control

2008+ Begin 10 year drive to migrating 50% of participants over to price responsive TOU rate programs.

Strategy outcome

Shows positive benefit /cost ratio: 1.4 and would drive appreciable Energy Savings and improve reliability
Maintain or increase MW under control and reverse deterioration of current Load Management infrastructure
Utility would earn a rate of return on any new investment in the DR Program
Structure results in total net savings to all rate payers. Large population would be well positioned to easily move to price responsive programs from new platform.

Implementation cost

Recommend implementation to examine variables that affect business case while encouraging both third party and utility participation. Program Cost is directly correlated to long term system performance. The net savings come from avoided high supply costs during peak load periods.
|| Cash Infusion to Utility || Utility's Ratebase Rate of Return ||Current Capacity Value to Ratepayers

Source of Funding

The initial funding would come from private sector for existing legacy equipment purchase and upgrade, as well as marketing services. Cost recovery would come over time and be related to demonstrated load shed, where peak load pricing would be avoided.

Funding sources	Yes	No
Private Sector Funding	☒	☐
Public Sector Funding	☐	
Consumer/Ratepayer Funds	☒	

Indicators

Will a 3rd party invest in a utility owned infrastructure? Will a 3rd party guarantee MW reductions?
How does a 3rd party cooperate with a utility to dispatch based both on price and reliability?
What are the resulting distribution benefits for a peak load reduction program?
What will be the market acceptance of smart thermostats? Price responsive programs?

Source

MADRI Study 2006

A. Current state of indicator

The efficacy measures of current load control systems is declining in NJ. There is uncertainty in the available residential capacity which can be reliably called upon for peak load shed. This represents a relatively small percentage of the growing peak load, and provides decreasing safety margin against power disruption. We propose using a sampling study to assess the integrity and operational status of the legacy systems in place now, and proactive M&V to continually monitor their state of readiness. Additionally, the current environment within utilities is fragmented, with no clear mandate or incentive for them to drive these solutions into the ratepayer base.

B. Indicator Projection to 2020.

By 2010 the amount of reliable, measurable load management capacity in NJ will be at 125MW, and will be available for dispatch as the equivalent of an on-demand spinning reserve delivered efficiently and with minimal risk to the utility, through a third party provider. Intensified dispatch will also improve the economic rationale. By 2020, this amount will have increased to 300 MW as the simplest and most cost effective grid reliability preservation method in the nation. The revitalized DSM platform would be thermostat based, and the extent of adoption would directly yield load-shift and conservation effects from the programmable t-stats. A solid platform for evolution to full price responsive programs would be an added benefit by this time. Finally, utility, regulator, and customer incentives would be aligned.