

Demand Side Management

Presentation to IRP Advisory Group

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DSM Study Objective

Evaluate DSM measures and programs
as alternatives to Energy Supply Side options

Improve the overall efficiency of the system

DSM Study Goal

Select and pursue energy efficiency
DSM programs

Reduce overall costs to KIUC and
customers

DSM Measures

An individual application for changing
customer demand

- Compact fluorescent lights
- Occupancy sensors
- T-8 lamps with electronic ballast

DSM Programs

A group of measures designed to address customer end uses

- Lighting
- Refrigeration
- Motors

DSM Concepts

The implementation strategy for providing
DSM programs

- Rebates
- Education
- O&M

Selecting Measures

- Identification
- Technical potential
- Economic potential
- Screening

Screening Measures

Total Resource Cost Test (TRC)

Compares the measure's total costs with total benefits

Costs include customer and utility costs

Benefits include avoided cost of generation,
transmission and distribution

Select Programs

Catalog of economic measures

Pass the TRC with ratio of 0.8 or higher

Group by concept

Commercial customers existing and new

Rebates and O&M Strategies

DSM Scenarios

Alternative strategies for implementation

Budget allocations to increase penetrations

Evaluate Programs

Scenario analysis comparing generating options with DSM programs

Total system simulation using LCG's UPLAN model

Integrated Resource Plan

Selection of the combination of new generation and DSM programs that best achieves the planning goals

Commercial Measures