

Sacramento Municipal Utility District

Comprehensive Municipal DSM

Sacramento Municipal Utility District (SMUD) is a case study of a significant utility turnaround. Because of problems at its Rancho Seco nuclear power plant in the late 1980s, SMUD was forced to raise rates several times and was suffering from a lack of public confidence and a demoralized staff. Following on the heels of voter referenda to shut the plant and its continuing maintenance problems, SMUD closed Rancho Seco permanently and thus ushered in a new and exciting era at the utility.

SMUD was very fortunate to be able to purchase replacement power from its neighboring California utilities, which gave it time to chart a new course. SMUD's insightful Board of Directors hired David Freeman, a strong advocate of public power, to take the helm. Freeman single-handedly has been credited with turning SMUD around, from a despondent position to a utility with power and vision. Freeman's strategy, reinforced by the Board, was to focus intensely on energy efficiency and to invest proactively in renewable energy resources. Coupled with flexible blocks of purchased power identified in its integrated resource plan, SMUD's vision crystallized and was clearly aimed at providing heightened levels of customer services to alleviate customer bills in the short term and to provide a highly diversified resource portfolio for a long term and sustainable energy future for the Sacramento region.

Today SMUD offers its customers a comprehensive array of energy efficiency and load management programs and their impacts are impressive. After years of annual DSM expenditures in the range of \$3-8 million, in 1991 SMUD's DSM budget grew to \$38 million, reflecting its commitment to the DSM resource. By 1993 the Energy Efficient Refrigerators program, for example, had resulted in purchases of more than 70,000 energy-efficient refrigerators while 63,000 old, inefficient refrigerators had been collected and recycled. The Direct Investment program has provided electric-heat customers with almost 15,000 energy efficiency measures for free. Participants of the Residential Peak Corps program, SMUD's leading load management program, have installed 96,130 air conditioning cyclers. Through the Shade Tree program approximately 109,000 trees have been planted, and 1,200 solar water heaters have been installed through the Solar Domestic Water Heater program, a program that has now been expanded to promote rooftop solar photovoltaics. Equally impressive results have accrued from SMUD's commercial and industrial retrofit programs.

While its DSM programs are on track, SMUD has concurrently been promoting renewable energy resources, from centralized and decentralized solar applications to wind generation. SMUD has proven that it is possible to dramatically change course, and to do so for the better. Not only have rates been stabilized, but citizens in Sacramento are now proud of their municipal utility. SMUD has listened to voters' wishes and invested in the city's future, concurrently setting a powerful model for electric utilities around the world.

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SACRAMENTO MUNICIPAL UTILITY DISTRICT Comprehensive Municipal DSM

Sector: Residential, Commercial, Industrial

Measures: A wide spectrum of efficiency improvements from weatherization measures and solar water heating to high efficiency HVAC and lighting.

Mechanism: Rebates for equipment efficiency improvements for all sectors; new construction rebates; a broad range of load management; direct weatherization installation

History: Began conservation efforts with load management in the 1970s; In 1989 began full range of DSM and renewable energy programs

1993 PROGRAM DATA

Energy savings:	96.4 GWh
Lifecycle energy savings:	1,446 GWh
Capacity savings:	35 MW
Cost:	\$32,718,000

CUMULATIVE DATA (1978-1993)

Energy savings:	269.3 GWh
Lifecycle energy savings:	4,039 GWh
Capacity savings:	309 MW
Cost:	\$196,367,000

The Results Center produced 126 profiles of the most successful energy efficiency and renewable energy programs in the United States and around the world in the early and mid 1990s. With the support of the John D. and Catherine T. MacArthur Foundation, Ted Flanigan directed a research team at Colorado-based IRT Environment to produce and distribute these exceptional examples. Thanks to strong demand for solid case studies, The Results Center was supported by dozens of major utilities and energy associations worldwide. Today, The Results Center is managed again by Ted Flanigan, now at California-based EcoMotion Incorporated, a firm focused on strategic consulting, information dissemination, program design, outreach services, and aggressive implementation. To nominate highly successful programs, contact: The Results Center, c/o EcoMotion, 15375 Barranca Parkway, F-104, Irvine, CA 92618, (949) 450-7155, or TFlanigan@EcoMotion.us