

Demand Response Programs Of Public Power Utilities

July 2010

Note: This report was compiled in July 2010 by Meredith Varela, a senior at the University of Virginia and a 2010 summer intern at the American Public Power Association. Public power utilities whose demand response projects are not included in this report, or whose program descriptions require updating, should send updated information to Robert Varela, APPA editorial director, at RVarela@APPAnet.org.

Demand response is broadly defined as the ability of customers to reduce their electricity consumption in response to a signal from the utility (or regional transmission organizations), price rates or incentives. There are two major categories of demand response: emergency demand response when the load becomes too heavy and must be reduced to maintain service; and economic demand response when prices rise as a result of higher demand or market conditions.

Public power utilities offer a variety of demand response services to their customers. A 2008 APPA survey of public power utilities found that 54 percent of respondents had time-of-use or incentive rate programs and 43 percent offered load response (peak shaving) programs.¹ Usually, the goal in demand response is to reduce the peak load to cut costs, but it can also be used to increase demand during off-peak hours when supply is great and demand is low. The increase in smart metering and smart grid technology offers greater possibilities for time-of-use rates, dynamic pricing programs, load management and integration of new energy storage technologies such as plug-in hybrid electric vehicles. Renewable energy (such as solar panels) that can be installed by customers to generate energy may also be considered demand response because the customer may rely more heavily on these alternative power sources during peak hours.

Editors' note: This list was compiled using information from member utilities' websites (including tariff sheets), media reports, and publications such as the California Municipal Utilities Association's Energy Efficiency Report. If a utility wishes to correct, update or add information to this list, please contact publicpowerdaily@appanet.org.

Following is a list, arranged by state and alphabetically, of public power systems' demand response programs:

- **Anchorage Municipal Light & Power (AK)** offers interruptible rates for customers with a peak load of at least 100 kW. http://www.mlandp.com/redesign/rates_and_tariff.htm
- **Opelika Light & Power (AL)** plans to install a fiber-to-the-premise system to create a Smart Grid as well as offer cable TV and Internet service to customers. The new Smart Grid would help

¹ American Public Power Association, "Result of the 2008 Energy Services Survey Focusing on Energy Efficiency, Demand-Side Management, and Conservation Programs at Public Power Utilities," November 2008.

manage the load, reduce peaks, and reduce customer energy costs by using technology such as direct load control to cycle appliances.

http://www2.oanow.com/oan/news/local/article/opelika_takes_first_steps_to_bring_cty-run_cable_internet_service_to_reside/156706/

- **Sylacauga Utility Board (AL)** installed a computer-controlled load management system to control peak demand. They are also upgrading their SCADA (system control and data acquisition) system to improve their ability to monitor power usage and curtail load when necessary. SUB also has a pilot program installing 150 smart meters.
<http://www.sylacauga.net/utilities/electric/electric.htm>
- **Hohokam Irrigation & Drainage District (AZ)** offers time-of-use rates for residential customers.
<http://www.hohokampower.com/electricrates.html>
- **Pinal County Electric District No. 2 (AZ)** offers a special rate for customers with solar energy systems. They also offer an experimental time-of-use rate to commercial customers.
http://www.ed2.com/ci_rate.html
- **Pinal County Electric District No. 3 (AZ)** is offering time-of-use rates to residential customers. They also offer an incentive for installing solar power.
<http://www.ed-3.org/view/52>
<http://www.ed-3.org/view/56>
- **Salt River Project (AZ)** has partnered with EnerNOC to implement its SRP PowerPartner program for commercial customers with billing demand in excess of 100 kilowatts and who agree to voluntarily reduce power consumption during times of peak demand or high wholesale electricity prices. There is no penalty for facilities that fail to meet their curtailment goal. SRP also received stimulus funding from the DOE and plans to use the money to double its advanced metering infrastructure. Partnering with Elster, SRP will install approximately 1 million smart meters. SRP states that the project has already increased voluntary time-of-use rate participation because customers can view TOU data online.
<http://www.srpnet.com/energy/powerwise/business/powerpartner.aspx>
<http://www.srpnet.com/newsroom/releases/051810.aspx>
- **Anaheim Public Utilities (CA)** offers a voluntary load reduction program where businesses are notified via pager, phone or e-mail in order to be given time to prepare their loads for curtailment. Anaheim also offers a load curtailment exemption program to those “customers who can curtail load by 15 percent either at a single location or by aggregating their total electrical load (minimum 1 megawatts).” Customers must curtail their load within 15 minutes. Participants in the program are exempt from rotating outages so long as they curtail load by 15 percent during Stage 3 rotating outage events. The utility also offers a rebate to businesses that invest in a new Thermal Energy Storage cooling system that shifts peak energy used by air conditioners to evening hours as well as increasing efficiency.
http://www.anaheim.net/utilities/adv_svc_prog/TES/TESIncentive.pdf
- **Burbank Water & Power (CA)** offers time-of-use rates for large and extra-large (over 1,000 kVA demand) commercial customers. They also offer interruptible service to industrial customers at their discretion. BWP will also be initiating a new Home Energy Report program in 2010, providing customers with energy usage information compared to similar nearby households.
<http://www.burbankwaterandpower.com/electric/commercial-and-industrial-electric-rates>
California Municipal Utilities Association Energy Efficiency Report, March 2010
- **City of Palo Alto Utilities (CA)** offers time-of-use rates for medium commercial customers with a load of 500 to 1,000 kW and large commercial customers with a load of at least 1,000 kW per month. Palo Alto has also taken steps through its LEAP Program to study what other demand response programs would be received positively by customers, such as curtailment or

interruptible loads and direct load.

http://www.cityofpaloalto.org/depts/utl/business/business_rates.asp

- **Colton Electric Utility (CA)** offers time-of-use rates for customers with more than 200 kW demand and “one 5 MW customer will be curtailing 4900 kW between noon and six PM on summer weekdays.” CEU is also testing other demand reduction technologies such as wireless Internet controlled thermostats and energy storage systems.
California Municipal Utilities Association Energy Efficiency Report, March 2010
- **Glendale Water & Power (CA)** received stimulus funding to install 84,000 smart meters that will provide customers access to data about their energy usage and enable dynamic rate programs. GWP also plans to install thermal energy storage cooling systems in municipal buildings. In addition, they are conducting two pilot programs using funding from DOE. “The first program would be a price responsive customer directed program that would be a non-firm resource and economic-based demand response program that pays participating customers a market-based rate for demand response. The second program would be a reserves program where reserves would be available “on call” firm demand response resource program with relatively short customer notices and relatively short curtailment durations.”
California Municipal Utilities Association Energy Efficiency Report, March 2010
- **City of Healdsburg (CA)** has implemented a time-of-use rate for residential and commercial customers.
CMUA Energy Efficiency Report, March 2010
- **Imperial Irrigation District (CA)** For a DEED project, IID conducted a study “using a combined application of thermal energy storage (using an “Ice Bear” TES device) and time-of-use rates to reduce costs in delivering energy to customers by shifting the high-priced energy available during critical peak times to low-cost energy available during off-peak times.” They developed a software tool to analyze the effectiveness of the combination of TES/TOU in reducing costs, which can be used by other utilities to determine whether the same program would be cost-effective for them.
<http://www.appanet.org/applications/deed/viewDeed.cfm?targetDeedID=421>
- **Los Angeles Department of Water and Power (CA)** offers customers an “experimental real-time pricing service” for those with a demand of 250 kW or more. Customers in the program must also be prepared to curtail their load at the request of LADWP during peak demand. The same rate schedule is also available to customers served under the LADWP’s 34.5- kV system. They also offer an energy load-monitoring program to large commercial and industrial customers.
<http://www.ladwp.com/ladwp/cms/ladwp008881.jsp>
<http://www.ladwp.com/ladwp/cms/ladwp003154.jsp>
- **Modesto Irrigation District (CA)** has a number of demand-response programs in place. Residential and commercial customers who participate in the Shave the Energy Peak (STEP) program receive bill discounts in exchange allowing MID operators to cycle central AC units on and off. MID also offers an interruptible rates program that allows MID operators “to reduce electricity demand by requiring cessation of the curtailable portion of customer load.” MID also finished installing over 100,000 new “smart meters” in March 2010.
<http://www.mid.org/meterproject/default.htm>
- **Pasadena Water & Power (CA)** is working with OPOWER to develop customized home energy reports for residential customers that will compare the electricity usage of each recipient with similar households. For commercial and industrial customers, PWP offers DIET (Direct Install Efficiency Program) to install the latest energy efficiency and demand response technologies, such as daylight harvesting and HVAC cycle management.
CMUA Energy Efficiency Report March 2010
- **Rancho Cucamonga Municipal Utility (CA)** charges all customers with a load exceeding 200 kW based on a time-of-use rate. They also have a city load reduction program for all city facilities with a back-up generation system.

- CMUA Energy Efficiency Report March 2010

 - Redding Electric Utility (CA)** has begun to implement a thermal energy storage program to reduce peak load. REU also offers incentives to customers who install solar panels.
CMUA Energy Efficiency Report March 2010
 - Riverside Public Utility (CA)** offers rebates to commercial customers who install solar photovoltaic systems and has a pilot program testing thermal energy storage. They also offer residential customers a rebate for installing photovoltaic panels. RPU also received stimulus funding some of which will be used to install a photovoltaic electric vehicle charging station to offset expensive peak power.
CMUA Energy Efficiency Report March 2010
 - Roseville Electric (CA)** has developed a Power Partners program for residential customers. This voluntary program cycles customers' central AC on and off during periods of high demand. Participants receive a \$10 rebate for registering and a \$10 rebate each summer they participate.
http://www.roseville.ca.us/electric/home/power_partners/default.asp
 - Sacramento Municipal Utilities District (CA)** has a number of demand response and load management programs. Customers who enroll in the Peak Corps program allow SMUD to cycle their central AC on and off during peak demand periods by sending a radio signal to the cycling device. Commercial and industrial customers have the option of enrolling in the Voluntary Emergency Curtailment Program. During times of high demand, SMUD asks participants to reduce their electrical use. There is no penalty for those customers that cannot meet this request for load curtailment. SMUD is also installing a comprehensive smart grid, electric vehicle charging stations, and smart meters in all homes and businesses using ARRA stimulus funding. Customers will have access to a home energy management system online, allowing them to see the previous day's energy use.
<http://www.smud.org/en/residential/peak-corps/pages/index.aspx>
<http://www.smud.org/en/business/saving-energy/pages/vecp.aspx>
<http://www.smud.org/en/smartmeter/Pages/default.aspx>
 - Silicon Valley Power (CA)** has a voluntary load reduction program called the Power Reduction Pool for commercial and industrial customers. Participating customers reduce their load by at least 200 kW during system emergencies. One industrial customer is on an interruptible rate.
CMUA Energy Efficiency Report March 2010
 - Victorville Municipal Utility Services (CA)** charges all commercial customers time-of-use rates.
CMUA Energy Efficiency Report March 2010
- Platte River Power Authority (CO)** is offering rebates to all businesses within its member utilities that invest in energy efficiency improvements or equipment to reduce demand during the summer peak period.
http://www.ci.longmont.co.us/lpc/bus/eep_homepage.htm
- Loveland Water & Power (CO)** offers a voluntary program called Partnering with Power where the utility installs a remote-controlled device on participants' air conditioners to cycle the air conditioner during peak demand. There is no incentive offered and the program is voluntary for residential and commercial customers. Loveland also offers an automatic load profiling service so customers can view their power consumption data online. They also offer interruptible service by contract for commercial and industrial customers.
<http://www.ci.loveland.co.us/wp/power/pwp/main.htm>
- Fort Collins Utilities (CO)** offers residential customers that have central air conditioning an AC Load Management program. At no charge, the utility installs a radio-controlled device near the central AC unit that cycles the device on and off at 15-minute intervals. Participating customers receive a \$4 per month rebate on their bills between May and September. Fort Collins also received stimulus funding from DOE to install 79,000 smart meters and in-home demand

response systems including in-home displays, smart thermostats and air conditioning and water heater control switches, automate transmission and distribution systems, and enhance grid security.

<http://www.fcgov.com/conservation/res-ac.php>

Smart Grid Research Project Spreadsheet (Prepared by APPA)

- **Colorado Springs Utilities (CO)** offers a Peak Demand rebate program for medium and large business customers. Participants must provide verified electric demand savings through eligible demand-side management measure. These projects must lead to a minimum 10 kW demand reduction during the summer peak period (weekdays, 3-6 PM). It can come in the form of greater energy efficiency or load shifting.
<http://www.csu.org/business/greenback/rebates/peak/item1324.html>
- **Connecticut Municipal Electric Energy Cooperative (CT)** received stimulus funding from the Department of Energy to build a regional smart meter infrastructure, including five municipal utilities. The utilities will implement time-varying rates, control and management systems to allow customers to better control their energy usage and reduce peak demand.
<http://www.smartgrid.gov/project/connecticut-municipal-electric-energy-cooperative-smart-grid-project>
- **Norwich Public Utilities (CT)** issues a Power Alert on days of high peak electricity usage. On Power Alert Days, customers are notified and asked to initiate energy efficiency measures. NPU is also a member of CMEEC and will receive stimulus funding to install two-way meters, technology to communicate data directly between the meter and the utility, and an optional time-of-use rate for customers. NPU will also test smaller projects such as direct thermostat controls, in-home displays and a website for customer information.
<http://norwichpublicutilities.com/energyefficiency/efficiency-demand.html>
- **Groton Utilities (CT)** offers a residential time of use rate with peak hours from 7 am to 9 pm. They also offer cash incentives to residential, commercial and industrial customers who will voluntarily curtail their electricity use during peak times of the year.
http://www.grotonutilities.com/electric_bozrah_rates.asp
http://www.grotonutilities.com/elec_conserv_comm_demand.asp
- **City of Tallahassee Utilities (FL)** created a comprehensive demand side management plan combining greater energy efficiency and demand response. The city is receiving \$8.8 million in stimulus funding to develop a smart grid system and deploy smart meters throughout the region, enabling the realization of this demand side management plan. “The smart-grid energy management system will implement a comprehensive demand response program, including smart thermostats and advanced load control systems that will target residential and commercial customers and lead to an estimated 35 MW reduction in peak power.”
<http://www.smartgrid.gov/project/city-tallahassee-smart-grid-project>
http://www.tal.gov.com/you/energy/pdf/dsm_plan_022008.pdf
- **Kissimmee Utility Authority (FL)** offers curtailable service rates and interruptible service rates to customers with monthly demand of 500 kW or more. Non-residential customers with demand above 500 kWh per month are offered time-of-use rates, while non-residential customers with monthly demand over 5,000 kWh per month are offered time-of-day rates.
<http://www.kua.com/Rates/2009-Electric-Rates.pdf>
- **Gainesville Regional Utilities (FL)** offers incentives for installing solar photovoltaic systems and a net metering program for residential customers. They also offer time-of-use rates for all customers.
<http://www.gru.com/OurCommunity/Environment/GreenEnergy/solarHub.jsp>
<http://www.gru.com/Pdf/RatesCharges.pdf>

- **JEA (Jacksonville, FL)** offers curtailable service rates, interruptible service rates, and time-of-use rates. JEA was also selected to receive stimulus funding to install a new smart meter network and other grid enhancements. Using this new technology, they will introduce a dynamic pricing pilot. http://www.jea.com/about/pub/downloads/FY_Rate_Increase_Schedule.pdf
Smart Grid Research Project Spreadsheet
- **Lakeland Electric (FL)** offers time-of-day billing for commercial, industrial and institutional customers. They also offer net metering for all customers with renewable energy generators. <http://www.lakelandelectric.com/Business/CommercialIndustrialInstitutional/ProductsServices/TimeofDayBilling/tabid/104/Default.aspx>
<http://www.lakelandelectric.com/RenewableEnergy/NetMetering/tabid/385/Default.aspx>
- **City of Leesburg (FL)** received federal stimulus funding to install smart meters and energy management systems for 23,000 customers. Customers will have access to near real-time data on their energy usage as well as energy management systems allowing them to program when appliances like AC and water heaters run. Key consumer initiatives include time-differentiated rates and demand response options for reducing peak load. http://www.ci.leesburg.fl.us/news/news_item.aspx?item=Leesburg_Approaches_1_Million_in_Savings_From_Creative_Electric_Conservation
Smart Grid Research Project Spreadsheet
- **New Smyrna Beach Utilities Commission (FL)** offers a load management program that allows the utility to cycle HVAC and water heaters during peak hours in exchange for credit on customers' bills. <http://www.ucnsb.net/electric/load-mgmt.aspx>
- **City of Quincy (FL)** received stimulus funding to deploy a smart grid network across the entire customer base, including two-way communication and dynamic pricing to reduce utility bills. Smart Grid Research Project Spreadsheet
- **Ames Electric Department (IA)** offers a load management program called Prime Time Power that cycles the customer's AC unit during high demand. Customers receive credit on their bill for participating. The utility also has a Power Watch Gauge on their website to alert customers to how high demand for power is and what steps may be taken to reduce demand. <http://www.cityofames.org/ElectricWeb/PrimeTimePower/Default.htm>
<http://www.cityofames.org/ElectricWeb/Widget/powerWatch.htm>
- **Indianola Municipal Utilities (IA)** offers a time-of-use rate for residential customers. <http://www.i-m-u.com/electricrates.htm>
- **Waverly Light & Power (IA)** offers a general, commercial and municipal time-of-use rate. They also offer interruptible rates at their discretion. <http://wlp.waverlyia.com/commercial/rate-design.aspx>
- **The Iowa Association of Municipal Utilities (IA)** received stimulus funding from the Department of Energy to deploy smart programmable thermostats to member utilities that would allow for direct load control of air conditioning by the utilities and customer access to energy usage online. They will also make wider use of dynamic pricing based on demand. <http://www.smartgrid.gov/project/iowa-association-municipal-utilities-smart-grid-project>
<http://www.iamu.org/default%20page%20links/Smart%20Thermostat%20Participant%20Update.pdf>
- **Idaho Falls Power (ID)** received stimulus funding from the DOE to install an advanced metering infrastructure and implement voluntary demand response and energy efficiency programs, such as thermostats and in-home units. http://www.idahofallsidaho.gov/wwwroot/userfiles/files/ifp/smart_grid.pdf

- **City of Geneva (IL)** offers optional time-of-use rates for large industrial customers with a demand greater than 2,000 kW.
<http://www.geneva.il.us/Departments/PublicWorks/rates.htm>
- **Naperville Department of Public Utilities (IL)** is implementing a smart grid initiative using funding from ARRA and DOE. They plan to install 57,000 smart meters to help customers analyze energy usage and adjust load and also will have a completely automated grid.
<http://www.naperville.il.us/smartgrid.aspx>
- **Crawfordsville Electric Light & Power (IN)** offers a peak management program for cycling air conditioners and water heaters. The utility also offers two special rate plans for industrial customers to manage load.
<http://www.celp.com/peakmanagement.shtm>
<http://www.celp.com/planrates.shtm>
- **Peru Utilities (IN)** offers peak management credits to any customers who volunteer to have their AC and/or electric water heater cycled by the utility. The utility also offers a “coincident peak reduction rate” for industrial customers where the customer is signaled in advance when the peak will occur and takes steps to reduce energy usage during peak hours, receiving credit on their bill.
<http://www.peruutilities.com/ElectricRates.htm>
<http://www.peruutilities.com/InterruptibleElectricRate.htm>
- **Richmond Power & Light (IN)** offers a time-of-use rate for industrial customers with a load of 50 kW or more. RP&L also offers a coincident peak service rate for industrial customers who agree to move load from on-peak to off-peak hours.
http://www.rp-l.com/industrialrates.htm#LPS_peak
- **The City of Beloit (KS)** came up with an integrated resource plan in 2007 with a goal of looking at demand side management and whether it would be cost-effective in a small market. The city decided to implement a DSM program aimed at “valley-filling” in the summer (increasing off-peak demand) and strategic load growth in the winter beginning in 2008 and 2010.
http://www.beloitks.org/prod/welcome/city_departments/electric/
- **The City of Coffeyville (KS)** offers interruptible service to commercial and industrial customers. Customers who have interruptible service may also receive an off-peak discount rate. No new customers are being admitted to this program and it may be canceled.
<http://www.coffeyville.com/Electric%20Rates/Schedule%20GS-IOP-02.pdf>
- **Lafayette Utilities System (LA)** offers net metering for customers who produce their own electricity using renewable energy. LUS also received federal stimulus funding to install more than 57,000 smart meters to reach the full service territory with two-way communications, enable consumers to reduce energy use with smart appliances and dynamic pricing, and automate the electric transmission and distribution systems to improve monitoring and reliability.
<http://www.lus.org/site303.php>
Smart Grid Research Project Spreadsheet
- **The Town of Belmont (MA)** is implementing a demand response program to offer customers an incentive to shift load to off-peak hours. The town is also considering a demand response direct load control program for residential customers, cycling AC or water heaters, and considering real-time pricing. They plan to promote solar energy, offer a solar rebate, and institute net metering.
http://www.town.belmont.ma.us/public_documents/BelmontMA_Light/Efficiency&Renewables.pdf

- **Braintree Electric Light Department (MA)** is testing a new program called GroundedPower that offers customers real-time energy usage information and select from possible actions to lower their energy usage.
<http://www.beld.com/SiteDocuments/GroundedPowerlaunchPR-1.pdf>
- **Chicopee Electric Co. (MA)** offers an off-peak water heating rate for all customers.
<http://www.celd.com/index.php?page=electric-rate-information>
- **Concord Municipal Light Plant (MA)** offers a discount for customers who use an electric thermal storage heater to reduce peak use. They also offer a time-of-use rate for all their customers and a discounted rate for controlled electric water heaters in residences.
http://www.concordma.gov/Pages/ConcordMA_LightPlant/ets
http://www.concordma.gov/Pages/ConcordMA_LightPlant/CMLP_new_rates
- **Groton Electric Light (MA)** For a DEED project, Groton is studying demand response triggered by wholesale price levels. GEL is also testing different methods of cycling residential cooling systems using smart thermostats.
<http://www.appanet.org/applications/deed/viewDeed.cfm?targetDeedID=422>
- **Marblehead Municipal Light Department (MA)** received stimulus funding from the Department of Energy to install 10,000 smart meters for all their customers allowing them to view their energy usage in real time. They will also implement a pilot program to “assess the effectiveness of real-time pricing and automated load management.”
<http://www.smartgrid.gov/project/marblehead-municipal-light-department-smart-grid-project>
<http://www.marbleheadelectric.com/index.php?id=141>
- **Bay City Electric Light & Power (MI)** offers time-of-use rates for large commercial and industrial customers with a load of 25 kW or more and for large commercial and industrial customers with a high load of 100 kW or more.
<http://baycitymi.org/Utilities/Electric/Electric%20Service%20Rate%20Schedule.pdf>
- **Lansing Board of Water & Light (MI)** offers voluntary curtailment service or interruptible service to commercial and industrial customers. Customers are fined if they choose not to interrupt or curtail their load.
http://www.lbwl.com/rates/10_electCurtailmentRider.pdf
- **Alexandria Light & Power (MN)** offers a voluntary load management program to their residential customers. At no charge, the utility will install a load management switch to automatically cycle their central air conditioning and electric water heater during peak hours.
http://www.alputilities.com/residential_loadmanagement.cfm
- **Anoka Municipal Utilities (MN)** offers interruptible rates, off-peak rates, and a net metering rate. They also offer load management cycling HVAC and water heaters and a demand side management rate discount.
<http://www.anoka.govoffice2.com/vertical/Sites/%7B213A9A90-C8E1-49AA-AC02-51D3C4882D33%7D/uploads/%7B22BC5DB4-3229-4081-BAF0-C65B000192D8%7D.PDF>
- **Austin Public Utilities (MN)** runs a voluntary demand response program called Peak Alerts. Any customer may sign up and be notified by the utility during times of peak demand to conserve energy. They also offer a time-of-use rate and interruptible service.
http://www.austinutilities.com/pages/peakAlerts_background.asp
<http://www.austinutilities.com/files/pdf/Electric%20Rates%2025Nov09.PDF>
- **Barnesville Electric Department (MN)** offers two load management programs, one for off-peak heating with direct load control and another for a new electric water heater with direct load control.
<http://www.barnesvillemn.com/moving/electric.html>

- **Blue Earth Light & Water Department (MN)** offers an incentive for their voluntary load management programs cycling HVAC and/or water heaters.
<http://www.belw.org/sub.asp?p=rates>
- **Brainerd Public Utilities (MN)** offers discounts for dual-fuel heating systems, off-peak thermal storage heating systems, off-peak water heating systems and interruptible rates.
<http://www.bpu.org/PDF%20FILES/Rate%20information%20and%20increases/ELECTRIC%20SERVICE%20RATES-2009.pdf>
- **Detroit Lakes Public Utilities Department (MN)** offers a rebate for dual fuel systems and thermal energy storage systems. <http://www.detroitlakes.org/>
- **East Grand Forks Water, Light, Power & Building Commission (MN)** offers discounts for dual fuel and thermal energy storage heating systems. They also offer load management cycling water heaters and HVAC systems.
<http://www.egf.mn/DocumentView.aspx?DID=435>
- **Luverne Municipal Electric (MN)** offers a dual fuel interruptible service and commercial interruptible service.
http://www.cityofluverne.org/index.asp?Type=B_BASIC&SEC={62DC1D0B-FC57-4DAA-8CB2-83993F71E796}
- **Marshall Municipal Utilities (MN)** offers a load management program (mandatory for all new construction and remodeling with electric heating, water heating and air conditioning) that gives a monthly discount to customers in exchange for cycling water heaters, furnaces and AC. The utility also offers a rebate for installing electric water heaters that can be cycled. MMU also offers an interruptible rate for dual fuel heating systems for residential and commercial customers.
<http://www.marshallutilities.com/residential/loadmanagement.php>
<http://www.marshallutilities.com/residential/electricwaterheater.php>
<http://www.marshallutilities.com/business/rates.php#electric>
- **Moorhead Public Service (MN)** offers a discount for customers with dual-fuel heating, water heaters and air conditioners that are directly controlled. MPS also offers interruptible and curtailable rates for general service customers and a rebate for customers who run their own generation during curtailment periods.
<http://www.mpsutility.com/index.php/residential-rates?layout=blog>
- **City of Olivia (MN)** offers a load management program that cycles AC and/or water heaters in exchange for a monthly incentive check or credit on their bill.
http://www.olivia.mn.us/index.asp?Type=B_BASIC&SEC=%7B44C81CCA-ACF3-42A8-AB44-54F99CE0EED9%7D
- **Owatonna Public Utilities (MN)** runs a voluntary program called Peak Alerts where the utility alerts customers in the program to conserve energy during times of high demand. OPU also offers time-of-use rates.
<http://www.owatonnautilities.com/top/peakalert.php>
<http://www.owatonnautilities.com/top/rates.php>
- **Rochester Public Utilities (MN)** offers a voluntary load management program called Partners where the utility cycles the AC and/or water heater during peak hours in exchange for customer credit towards their bill. RPU also offers a general service time-of-use rate.
http://www.rpu.org/your_home/power_services/partners_program/
http://www.rpu.org/pdfs/2010_rates.pdf
- **Shakopee Public Utilities Commission (MN)** offers a voluntary load management program called Smart Switch where the utility cycles the AC during peak hours of the summer.
http://www.shakopeeutilities.com/2010-Smart_Switch.pdf
- **Southern Minnesota Municipal Power Agency (MN)** sponsors demand side management programs for their members, including load management programs to help reduce the need for new generation.
<http://www.smma.com/environment.asp?smmpa=29>

- **The City of St. Peter (MN)** requires all customers with a newly installed or replacement central AC to participate in their load management program. The utility cycles the AC unit during peak hours in the summer and the customers receives a credit on their bill.
<http://www.ci.st-peter.mn.us/publicworks/load.php3>
- **Thief River Falls Water & Light (MN)** offers a discount to residential, commercial, and industrial customers who allow their electric heat to be directly controlled by the utility.
<http://www.citytrf.net/ratesheet.pdf>
- **Willmar Municipal Utilities Commission (MN)** offers a voluntary Load Share program to cycle AC units and offers credits to customers for off-peak water heating. WMU also offers an interruptible load program where the utility pays customers to run their own generators during peak summer months at high demand.
http://www.wmu.willmar.mn.us/energy_services.htm
- **Columbia Water & Light (MO)** offers a load management program for residential customers allowing the utility to cycle their heat pump. There is also a load management AC cycling program for residential and small commercial customers who receive a 3% discount on their summer electric bill for participating. CWL also offers an interruptible rate for commercial and industrial customers. CWL also offers a Load Shedding or curtailment program for large commercial and industrial customers who can voluntarily reduce their load during hours of peak demand.
<http://www.gocolumbiamo.com/WaterandLight/Conservation/load.php>
<http://www.gocolumbiamo.com/WaterandLight/Rates/res-hp.php>
<http://www.gocolumbiamo.com/WaterandLight/Business/shedding.php>
<http://www.gocolumbiamo.com/WaterandLight/Rates/lg-ele.php>
- **City of Fulton Electric Utility (MO)** was selected by the Department of Energy to receive stimulus funding to replace current electric meters with smart meter technology that will allow them to implement a dynamic pricing program to reduce and redistribute customer energy use.
<http://www.smartgrid.gov/project/city-fulton-missouri-smart-grid-project>
- **Macon Municipal Utilities (MO)** For a DEED project, MMU is testing the possibility of using fat and oil-based phase change materials (PCMs) in HVAC systems to cool buildings during off-peak hours.
<http://www.appanet.org/applications/deed/viewDeed.cfm?targetDeedID=191>
- **City Utilities of Springfield (MO)** offers an interruptible rate for large commercial and industrial customers.
<http://www.cityutilities.net/pricing/pricing-electric-interruptible.pdf>
- **Town of Apex (NC)** offers a load management program that cycles electric water heaters, heat strips, and AC units during peak hours. Customers may choose the level of control they wish to allow the utility over their AC. All new homes costing more than \$10,000 automatically have the switch installed and are enrolled in the program at a minimum required participation level. The utility also offers time-of-use rates to all customers, a net metering rate for residential customers and a coincident peak demand charge for medium and large general power customers.
<http://www.apexnc.org/docs/util/pwLoadMgtProg.pdf>
<http://www.apexnc.org/depts/util/rates.cfm>
- **City of Concord (NC)** offers time-of-use rates for non-residential general power customers and industrial customers. They also offer a net metering program for any customer.
<http://www.ci.concord.nc.us/Departments/Electric/RateSchedules/tabid/580/Default.aspx>
- **City of Elizabeth City (NC)** offers a residential, commercial and industrial time-of-use rate and a coincident peak rate for nonresidential customers. The utility also offers a load management program for customers who receive credit per kWh of demand reduced during peak hours.

http://elizabethcity.govoffice.com/index.asp?Type=B_BASIC&SEC={FAEF3E47-E543-4DB2-836F-A59222B9B43E}

- **Town of Farmville (NC)** offers a voluntary load management program cycling electric water heaters and air conditioners or heat pumps. Customers receive a rebate of \$2 per month for cycling their water heater and a rebate of \$4 per month for cycling their air conditioner or heat pump.
http://www.farmville-nc.com/departments_utilities_electric.htm
- **Fayetteville Public Works Commission (NC)** offers time-of-use pricing to large industrial customers who own transmission and to medium industrial customers. PWC also conducted a pilot project using smart meter technology to allow participants to monitor their energy consumption online, set a monthly target for their bill, and allow PWC to cycle their appliances on and off at peak hours.
http://www.faypwc.com/News%20Archive-2009/news_092109.html
<http://www.faypwc.com/PDFs/Electric%20Rates/May%202010/Med%20Ins%20Serv%20TOU%20May%20010%20610%2007.pdf>
<http://www.faypwc.com/PDFs/Electric%20Rates/May%202010/Large%20Ind%20owning%20Trans%20May%2010%20610%2008.pdf>
- **Greenville Utilities Commission (NC)** offers curtailable service rates and peak demand rates for non-residential customers when registered demand equals or exceeds 750 kW for two consecutive months. GUC also offers a program called Beat the Peak where customers can sign up to have their water heater, heat pump and/or AC cycled by the utility.
http://www.guc.com/client_resources/residential/electricrates/e03a03b.pdf
http://www.guc.com/client_resources/residential/electricrates/e03cpc.pdf
http://www.guc.com/btp/default.aspx?section=Customer_Service
- **City of High Point (NC)** offers time-of-day and coincident peak rates for commercial and industrial customers.
<http://www.high-point.net/custsrv/commercial.cfm>
- **Kinston Public Services (NC)** offers time-of-use rates for residential and medium size commercial customers.
<http://www.ci.kinston.nc.us/publicservices/currentfeesandrates.htm>
- **City of Rocky Mount (NC)** offers a residential load management program called Beat the Peak that allows the utility to cycle customers' AC, water heater and/or electric heat strips during peak hours.
<http://www.rockymountnc.gov/utilities/loadmanagement.html>
- **City of Selma (NC)** offers a load management program called Electric-\$ave.
http://www.selma-nc.com/index.asp?Type=B_BASIC&SEC={E1629C4F-361B-4CE4-8D53-54275945F903}&DE={6F3EB474-528B-4571-913B-C8D3103F4307}
- **The Town of Smithfield (NC)** offers a residential load management program for cycling AC units and water heaters during peak hours in exchange for credits. The Town also offers a residential time-of-use rate, which requires the customer to participate in load management, a commercial time-of-use rate, and an industrial coordinated peak demand rate.
<http://www.smithfield-nc.com/pdfs/Co-Peak%20%20Time%20of%20Use%20Rates.pdf>
- **City of Statesville (NC)** offers the Switch & Save load management program for residential customers that allows the utility to cycle at least their water heater and central AC. The utility also offers a number of different time-of-use rates for all customers and coincident peak rates for commercial and industrial customers.
<http://www.ci.statesville.nc.us/Departments/ElectricUtilities/ElectricRates/tabid/270/Default.aspx>
- **The Town of Wake Forest (NC)** offers the "Beat the Peak" residential load management program that allows the utility to cycle a customers' water heater, heat strip and/or central AC during peak hours.
<https://www.wakeforestnc.gov/loadmanagement.aspx>

- **Wilson Energy (NC)** offers the “Beat the Peak” residential load management program that allows the utility to cycle a customers’ water heater and/or central AC. The utility also offers a special load management program for commercial and industrial customers.
<http://www.wilsonnc.org/departments/wilsonenergy/manageyourbill/>
<http://www.wilsonnc.org/departments/wilsonenergy/industryandbusiness/loadmanagement/>
- **City of Beatrice Board of Public Works (NE)** offers a load management program for customers. Customers receive a discount in exchange for allowing the utility to cycle their AC or hot water heater during peak hours.
<http://www.beatrice.ne.gov/departments/bpw/electric/pdf/loadmanage.pdf>
- **Burt County Public Power District (NE)** offers a load management program for irrigation customers. Customers can sign up to receive email or text notification of peak hours to reduce or shift their energy usage. (Program administered by NPPD.) BCPPD also offers a net metering program for customers with a renewable energy generator.
<http://www.burtcoppd.com/loadcontrol.asp>
<http://www.burtcoppd.com/netmetering.asp>
- **Cedar Knox Public Power District (NE)** offers a load management program for irrigation customers who volunteer to have their load directly controlled and interrupted during peak demand hours. Customers can sign up to be notified on control days via text message. (Program administered by NPPD)
<http://cedarknoxppd.com/load.asp>
- **Cuming County Public Power District (NE)** offers a load management program for irrigation customers who volunteer to have their load directly controlled and interrupted during peak demand hours. Customers can sign up to be notified on control days via text message or WebLink Internet access. (Program administered by NPPD)
<http://www.ccppd.com/irrigation.asp>
- **Custer Public Power District (NE)** offers load management programs for irrigation customers who volunteer to have their load directly controlled and interrupted during peak demand hours, and receive a discount on their bill. (Program administered by NPPD.)
<http://custerpower.com/Irrigation%20and%20Load%20Control%20Newsletter%202008.pdf>
- **Dawson Public Power (NE)** offers a load management program for irrigation customers who volunteer to have their load directly controlled for a certain number of peak days in exchange for a discount on their bill. Customers can be notified by email or text message or on the radio. (Program administered by NPPD)
<http://www.dawsonpower.com/dppdlmhowitworks.html>
- **Elkhorn Rural Public Power District (NE)** offers a load management program for irrigation customers who volunteer to have their load directly controlled for a certain number of peak days in exchange for a discount on their bill. (Program administered by NPPD)
http://www.erppd.com/load_management.asp
- **City of Gothenburg (NE)** offers a time-of-use rate for commercial or industrial customers that are able to shed a minimum of 50 kW during peak demand.
<http://www.ci.gothenburg.ne.us/Ordinances/Rate%20Ordinance.pdf>
- **Omaha Public Power District (NE)** developed a software program that provides real-time monitoring of customers’ energy profiles. OPPD also offers time-of-use rates to commercial and industrial customers and curtailment options for customers who can reduce their load upon request.
http://www.oppd.com/prodconsump10g/groups/web/documents/webcontent/22_001302.pdf
- **Nebraska Public Power District (NE)** offers both time-of-use rates and critical-peak-pricing rates as part of pilot programs. As part of the program, customers can choose to have a PowerCost Monitor installed in their homes to provide real-time data on energy usage. NPPD also offers a

“billable demand program” for irrigation customers that charges higher rates at peak hours. For irrigation, industrial and commercial customers, there is also a voluntary curtailment program where the utility pays the market price per megawatt-hour curtailed. NPPD also offers a load control program for irrigation customers. NPPD also offers demand management audits for commercial and industrial customers.

http://www.nppd.com/TimeofUse/Additional_Files/pilot_program.asp

http://www.nppd.com/My_Home/Product_Brochures/Additional_Files/load_management.pdf

- **Northeast Nebraska Public Power District (NE)** implemented a critical peak pricing program for irrigation customers during the summer months. They sent text messages to customers’ cell phones to inform them in real time when critical peak pricing periods would occur so farmers could reduce or shift their load during those hours. NNPPD also offers residential time-of-use rates.

http://www.electricenergyonline.com/?page=show_news&ID=136549

<http://dl.dropbox.com/u/787107/Wireless%20Industry%20Info/TextPowerCaseStudyForNortheastNebraskaPower.pdf>

http://www.nppd.com/billing/rates/files/Time_of_Use_Residential_Rates_2010.pdf

- **Twin Valleys Public Power District (NE)** offers a voluntary load management program for irrigation customers and interruptible direct control rates where the utility may shut off irrigation during emergencies. Customers are notified via text message, email, online, or on the local radio.

<http://www.twinvalleysppd.com/irrigation.html>

http://www.twinvalleysppd.com/irrigation_rates.html

- **Vineland Municipal Electric Utility (NJ)** allows customers generating their own power to sell power back to the grid during periods of excess generation. Customers are given credits for electricity delivered to VMEU’s system.

http://www.vinelandcity.org/Electric/VMEUsite/index_files/Page1395.htm

- **Long Island Power Authority (NY)** offers a load shifting option that allows participants to permanently lower their rates by shifting their electric use away from peak demand times. LIPA has also rolled out its LIPAEde program, which provides free programmable thermostats to customers and allows LIPA to adjust central AC systems when needed.

<http://www.lipower.org/commercial/ecodev/programs.html>

<http://www.lipower.org/commercial/efficiency/lipaedge.html>

- **New York Power Authority (NY – DEED Project)** is evaluating “the sodium sulfur BESS system”, a battery storage system, for the Long Island bus. The “system is said to have broad market potential for power quality and peak shaving applications at commercial and industrial customer sites as well as at utility substation sites.”

<http://www.appanet.org/applications/deed/viewDeed.cfm?targetDeedID=372>

- **Bowling Green Municipal Utilities (OH)** offers an on-peak/off-peak load management rate to large power customers as well as an interruptible service rate. BGMU is also installing AMI.

<http://www.bgohio.org/departments/utilities-department/electric-rates-effective-January%201%2C%202010>

<http://www.bgohio.org/departments/utilities-department/automated-meter-reading-equipment>

- **Village of Minster (OH)** offers an interruptible power rate to large power customers.

http://www.minsteroh.com/forms/EL_Ordinance.pdf

- **City of St. Mary’s (OH)** offers interruptible and curtailable service rates to general service customers.

http://www.cityofstmarys.net/electric_rates.htm

- **Westerville Electric Division (OH)** received a grant from APPA to launch the Smart Grid and Solar Power Project. Sites chosen for the pilot program will install solar panels on the roof to power batteries which will supply some of the power to the buildings during peak daytime hours and recharge at night. The City of Westerville also received federal stimulus funding to install a smart grid and smart meters facilitating time-of-use pricing.
Public Power News City of Westerville, Nov. 2, 2009
Smart Grid Research Project Spreadsheet
- **City of Wadsworth (OH)** received a grant from APPA in 2003 to run a pilot advanced metering project, allowing for real time pricing and direct load control of AC and water heaters. Recently, Wadsworth received federal stimulus funding to install a smart grid and deploy smart meters to 12,500 customers. This will help prepare the grid for broader use of plug-in hybrid electric vehicles that can help handle peak load.
<http://www.smartgrid.gov/project/city-wadsworth-oh-smart-grid-project>
<http://www.wadsworthcity.com/images/35/cuttingedge.pdf>
- **Duncan Power (OK)** is partnering with Honeywell to implement residential, commercial and industrial demand response programs. The city will replace 9,000 electric meters with smart meters, funded in part by ARRA stimulus money.
“Smart Grid Today” June 16, 2010 issue
- **City of Edmond Utilities (OK)** offers general service, and power and light time-of-use rates.
http://edmondok.com/docs/edmond_electric/service_rate_summary.pdf
- **Oklahoma Municipal Power Authority (OK)** runs a program for its member utilities called DEEP, “intended to assist member cities with qualified customers to reduce their electric service energy demands and costs.” The Demand Conservation Program, part of DEEP, looks specifically at reducing peak demand, especially for the largest customers. The program is voluntary for member utilities.
<http://ompa.com/programs/deep/>
<http://ompa.app7.net/wp-content/uploads/2010/04/Demandprogramguidelines.pdf>
- **City of Stillwater (OK)** offers a load curtailment rate for commercial and industrial customers, and time-of-use rates for commercial and industrial customers.
<http://stillwater.org/electric/rates.php>
- **Bonneville Power Administration (OR)** conducts a variety of DR pilot programs, including voluntary load curtailment for commercial and industrial customers and a residential direct load control pilot.
<http://www.bpa.gov/Energy/N/demand.cfm>
- **Central Lincoln People’s Utility District (OR)** received federal stimulus funding to install a smart grid and smart meters to give customers in-home energy displays and control of electrical appliances.
<http://www.clpud.org/news/NR%202009%20Smart%20Grid%20Announcement.pdf>
<http://www.smartgrid.gov/project/central-lincoln-peoples-utility-district-smart-grid-project>
- **Clatskanie People’s Utility District (OR)** offers a time-of-day demand rate for all customers.
<http://www.clatskaniepud.com/Rate%20Schedules.htm>
- **Hermiston Energy Services (OR)** is testing a home energy management system (HEMS) for residential customers in a small pilot project. The HEMS allows customers to view their energy use in real time, and the utility can send messages to customers during high peak demand to protect the system from brownouts.
Seattle Daily Journal Of Commerce, July 5-6, 2010
- **City of Milton-Freewater (OR)** offers a load management program called Radio Energy Management System where the utility uses a radio receiver to remotely cycle electric water

heaters, central heat and air conditioning during peak hours. Milton also offers net metering.

<http://www.mfcity.com/conservation#rems>

<http://www.milton-freewater->

[or.gov/sites/mfcity.com/files/File/electric/Res.%202180%20Electric.pdf](http://www.milton-freewater-or.gov/sites/mfcity.com/files/File/electric/Res.%202180%20Electric.pdf)

- **Laurens Commission of Public Works (SC)** offers an optional general service time-of-use rate.
<http://www.lcpw.com/>
- **City of Orangeburg (SC)** offers a time-of-use rate for all customers.
<http://www.orbgdpu.com/rates.htm>
- **City of Rock Hill (SC)** offers a critical peak pricing rate schedule for commercial and industrial customers with an average monthly demand exceeding 750 kW.
http://www.cityofrockhill.com/userfiles/file/documents/Rates_Commercial_EDR-1%28Code10%292008.pdf
- **Santee Cooper (SC)** offers a residential time-of-use rate as a pilot program. They also offer a time-of-use rate system to customers with their own generators who also receive credits for providing their power to the utility. Also offer time-of-use rates for commercial customers and for large commercial customers, interruptible and curtailable service rates. All commercial, industrial or municipal customers with a demand of at least 1,000 kW per month are charged based upon time-of-use rates. Santee Cooper is also testing a thermal energy storage system for commercial and industrial customers to shift the load from air conditioning to off-peak hours.
https://www.santeecooper.com/portal/page/portal/santeecooper/aboutus/rates/documents/2009%20Approved%20rates%20rev10_28_09.pdf
<https://www.santeecooper.com/portal/page/portal/santeecooper/mybusiness/thermalenergystorage/outdoor%20lighting>
- **Brookings Utilities (SD)** offers time-of-day rates for all their customers and an interruptible rate for customers with a load of 75 kW or greater.
<http://www.brookingsutilities.com/electric/rates.htm>
- **City of Madison Utilities (SD)** offers a variety of load management incentives, including interruptible off-peak service rates and rebates for cycling HVAC units and water heaters.
http://www.cityofmadisonsd.com/index.asp?Type=B_LIST&SEC={E5EBC19F-84F5-473B-8B64-CBB514CF19C0}&DE={244E9DF7-6A6C-4398-ACC4-B9B4514DC94C}
- **Missouri River Energy Services (SD)** offers commercial and industrial customers a monthly payment if they run their on-site generators during peak hours.
<http://66.231.15.127/ProductsServices/CustomOwnedGeneration.cfm>
- **The Electric Power Board in Chattanooga (TN)**, in conjunction with TVA, offers five-minute and sixty-minute interruptible service to commercial and industrial customers with a load greater than 1,000 kW. EPB is also testing a pilot program called EPB Energy Sense using programmable thermostats to allow customers to manage their energy use. The thermostat is programmed to use less power during hours of peak demand. EPB is also currently building a fiber optic Smart Grid and installing smart meters.
<http://www.epb.net/power/business/services/rate-billing-payment-services/>
<http://www.epb.net/power/home/products/epb-energysense/>
<http://www.epb.net/news/news-archive/epb-chooses-tantalus-for-smart-grid-network/>
- **Knoxville Utilities Board (TN)** Five-minute and 60-minute notice Interruptible Power are available for all qualified customers. For commercial and industrial customers, time-differentiated demand rates are available.
http://www.kub.org/wps/portal!/ut/p/c1/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gPC1OnYE8TI

[wMDS0njA60QQF9PDz8DQwMnU_1wkA68KtDkXQKcDIx8XEItTV3dPMw8jPHKB5oZQuQNcABHA30_j_zcVP2C7Owgj3JHRQB_6FB8/dl2/d1/L3dJMjJZZyEhL0lCakFBQVFnQUlqQ0FBaUNJQUNBb2dBSUJ1d0FDR0EhL1lCcDNwSnchLzZfSDg1QlNJNDlwOEhPNjAyUkhKNkNKVTBHNzY/](http://www.mds0njA60QQF9PDz8DQwMnU_1wkA68KtDkXQKcDIx8XEItTV3dPMw8jPHKB5oZQuQNcABHA30_j_zcVP2C7Owgj3JHRQB_6FB8/dl2/d1/L3dJMjJZZyEhL0lCakFBQVFnQUlqQ0FBaUNJQUNBb2dBSUJ1d0FDR0EhL1lCcDNwSnchLzZfSDg1QlNJNDlwOEhPNjAyUkhKNkNKVTBHNzY/)

- **Memphis Light, Gas, and Water (TN)** offers its commercial, industrial, institutional and government customers a service called Meter Intelligence. Participants can view their previous day's energy data each morning, and up to 24 months of previous data are available. Participants also receive email alerts notifying them when their usage exceeds certain user-defined parameters. http://www.mlgw.com/SubView.php?key=comm_meterintelligence
- **Morristown Utility Systems (TN)**, as part of TVA, offers five minute and sixty minute interruptible service to commercial and industrial customers with a load greater than 1,000 kW. MUS has also partnered with Tantalus Systems to develop a Smart Grid using their pre-existing fiber optic network. This will allow them to offer time-of-use rates and have greater load control. http://www.morristownutilities.org/general_power_rate_schedule.html#MSB
http://www.tantalus.com/2010-04-21_morristown.php
- **Nashville Electric Service (TN)** offers interruptible service rates to customers with a contract demand greater than 1,000 kW. When notified, customers must reduce load by a minimum of 500 kW. <http://www.nespower.com/5mr.html>
- **Tennessee Valley Authority (TN)** began a pilot program in 2009 that pays participating commercial and industrial customers to reduce the amount of power they are using at peak times. TVA has decided to extend the program, continuing incentives for the original 160 MW reduction and adding another 400 MW for a total peak reduction of up to 560 MW by 2012. http://www.tva.com/news/releases/aprjun10/560_peak.html
- **Austin Energy (TX)** Through its Power Saver Program, the utility provides residential and commercial customers who participate with free programmable thermostats in return for the ability to cycle air conditioners on and off during peak demand. Also, Power Saver Volunteers may sign up to be notified up to 10 times during the summer and be asked to reduce power from 3 pm to 7 pm using 4 steps: "switch off unnecessary lights, delay washing and drying clothes and using your dishwasher, cook dinner in your microwave oven rather than with an electric range, and turn up the AC thermostat by two or three degrees." The Power Saver Program for commercial customers offers rebates for any energy efficiency or load redistribution improvements that reduce peak demand during the summer. In addition, Austin Energy offers time-of-use and interruptible rates for commercial and industrial customers and a thermal energy storage program. <http://www.austinenergy.com/Energy%20Efficiency/Programs/Power%20Partner/programDetails.htm>
<http://www.austinenergy.com/Energy%20Efficiency/Programs/Power%20Saver%20Volunteers/index.htm>
<http://www.austinenergy.com/Energy%20Efficiency/Programs/Rebates/Commercial/Commercial%20Energy/index.htm>
- **CPS Energy (San Antonio, TX)** offers customers a free Peak Saver thermostat that can be programmed from anywhere via the Internet. CPS also offers a Load Tracker program that allows commercial customers to download interval load data and identify costly demand peaks. http://www.cpsenergy.com/Residential/Rebates/Peak_Saver/index.asp
<http://www.cpsenergy.com/LoadTracker/index.jsp>
- **GEUS (Greenville, TX)** offers rebates for installing programmable thermostats and electric water heater clocks that can be used to shift loads. They also offer a unique "pay as you go" electric service called emPOWER. GEUS also offers a time of use rate.

<http://www.geus.org/index.html>

- **Logan City Light & Power (UT)** offers a solar power incentive program and net metering for renewable energy. The utility also allows residents to borrow meters from the public library to read how much electricity an appliance is using.
<http://www.loganutah.org/Light%20and%20Power/Conservation/solar.cfm>
<http://www.loganutah.org/Light%20and%20Power/Conservation/Killawattmeter.cfm>
- **Springfield City Electric (UT)** offers a net metering pilot program. The utility also offers interruptible service rates for large commercial customers.
http://www.springville.org/departments/electric/distribution_transmission.php
<http://www.springville.org/departments/electric/2008/NET%20METERING%20PILOT.pdf>
- **City of St. George (UT)** offers net metering for residents with renewable energy generators. The city also participates in the Dixie Conservation Alert Program designed to reduce demand during the summer. Each day is designated as green, yellow or red during the summer, telling customers how much energy they need to conserve. Red days are mandatory conservation to avoid rolling blackouts.
<http://www.sgcity.org/conservationspecs.pdf>
- **Bristol Virginia Utilities (VA)** offers several general power and manufacturing time-of-use rates. BVU is also participating in a demand response program sponsored by TVA that is designed to reduce peak load for businesses.
http://www.bvu-optinet.com/data_elements/Rate_Schedules_Oct_2009_Electric.pdf
http://www.bvu-optinet.com/data_elements/EnerNOC_Demand_Response_Program_Press_Release_2-3-2009.pdf
- **Town of Culpeper (VA)** offers a time-of-use rate for any non-residential customer.
http://www.culpeper.to/officials/treasurer/Time_of_Use_Service.htm
- **Danville Department of Utilities (VA)** offers large commercial customers a time-of-use and curtailable load service. Danville is also installing AMI for their customers and plans to use a Meter Data Management System paired with time-of-use rates to help customers control their energy usage and lower peak demand.
<http://www.danville-va.gov/DocumentView.aspx?DID=1431>
<http://www.energycentral.com/gridandd/metering/news/en/16089027/Danville-Utility-Commission-gets-update-on-new-meters?>
- **Franklin Municipal Light & Power (VA)** offers a voluntary load management program called Cycle and Save that allows the utility to cycle a customer's water heater during peak hours in exchange for a monthly credit on their bill.
http://www.franklinva.com/index.php?option=com_content&view=article&id=95&Itemid=142
- **City of Manassas (VA)** offers a voluntary load curtailment rate for customers with a demand greater than 1000 kW.
<http://www.manassascity.org/DocumentView.aspx?DID=3138>
- **City of Salem (VA)** offers a voluntary large power time-of-use rate.
<http://www.ci.salem.va.us/depts/electric/rates.html>
- **City of Burlington Electric Department (VT)** offers residential and commercial time-of-use rates. BED has also contracted with EnerNOC to implement a more comprehensive demand response program.
https://www.burlingtonelectric.com/page.php?pid=98&name=minutes_jun08
https://www.burlingtonelectric.com/page.php?pid=49&name=commercial_rates

- **Swanton Village (VT)** offers a discount for residential and commercial customers if they allow the utility to cycle their electric water heater. They also offer a time-of-use rate for industrial and large commercial customers with a demand greater than 100 kW.
<http://www.swanton.net/pages/utilities.html>
- **Chelan County Public Utility District No. 1 (WA)** offers a time-of-use rate schedule to customers with average annual loads of 4 to 5 MW.
<http://www.chelanpud.org/documents/RatesUtilityServices.pdf>
- **Clark Public Utilities (WA)** offers off peak demand rates for commercial customers with demands greater than 30 kW and industrial customers with demands greater than 1500 kW.
<http://www.clarkpublicutilities.com/yourbusiness/businessRates/industrialElectricRates>
- **Public Utility District No. 2 of Grant County (WA)** offers an interruptible service rate schedule for commercial and industrial customers.
<http://www.gcpud.org/customerService/pdfs/Rate%20Sch%2092.pdf>
- **Klickitat County Public Utility District (WA)** offers time-of-use rates for irrigation service customers.
<http://www.klickpud.com/rates/timeuse.asp>
- **City of Port Angeles (WA)** offers a voluntary time-of-use rate and smart metering program for residential and commercial customers.
<http://www.ci.port-angeles.wa.us/pwConserv.htm#Smart>
- **Algoma Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). The utility also offers optional time-of-use rates to residential and commercial customers and mandatory time-of-use rates for large commercial and industrial customers with a monthly demand over 200 kW. They also offer a net metering program and rebates for purchasing renewable energy generators.
http://www.algomautilities.com/business_customers/default.asp?CategoryNumber=1
http://www.algomautilities.com/media/Electric_Rate_Tariff_Sheets.pdf
- **Boscobel Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Boscobel also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy).
http://www.boscobelutilities.com/business_customers/default.asp?CategoryNumber=1
http://www.boscobelutilities.com/business_customers/default.asp?CategoryNumber=4
- **Cedarburg Light & Water (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). CWL also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). CWL also offers net metering and gives a rebate for installing renewable energy generators for businesses and homes. The utility also offers optional time-of-use rates to residential and commercial customers and mandatory time-of-use rates for large commercial and industrial customers with a monthly demand over 200 kW.
http://www.cedarburglightandwater.com/business_customers/default.asp?CategoryNumber=1
http://www.cedarburglightandwater.com/business_customers/default.asp?CategoryNumber=6
http://www.cedarburglightandwater.com/energy_efficiency/default.asp?CategoryNumber=2&SubcategoryNumber=8
http://www.cedarburglightandwater.com/customer_services/default.asp?CategoryNumber=5&SubcategoryNumber=1

- **Hustisford Utilities (WI)** offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.
<http://www.hustisford.com/vertical/Sites/%7B34A43624-B946-4ED2-A4ED-CB12ACDB9047%7D/uploads/%7B19E8CE9C-2311-4118-962D-26DBE30F7439%7D.PDF>
- **Jefferson Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Jefferson also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy).
http://www.jeffersonutilities.com/business_customers/default.asp?CategoryNumber=1
http://www.jeffersonutilities.com/business_customers/default.asp?CategoryNumber=6
- **Juneau Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy).
<http://www.juneauutility.com/subpage.cfm?p=For Your Business&sp=27>
- **Kaukauna Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). KU also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). KU also offers the Power Profiler for business customers, an online program that creates custom load reports and offers access to energy usage data (Sponsored by WPPI Energy). KU also offers optional time-of-use rates for all their customers.
http://www.kaukaunautilities.com/business_customers/default.asp?CategoryNumber=8
http://www.kaukaunautilities.com/business_customers/default.asp?CategoryNumber=4
http://www.kaukaunautilities.com/business_customers/default.asp?CategoryNumber=1
http://www.kaukaunautilities.com/media/Electric_Rate_Schedule_Revised_2009.pdf
- **Manitowoc Public Utilities (WI)** offers an experimental, optional time-of-use rate for residential customers and a mandatory time-of-use rate for all customers whose monthly demand exceeds 200 kW at least 3 months of the year.
<http://www.mpu.org/pdfs/elecrates.pdf>
- The **Medford Electric Utility (WI)** offers optional time-of-day service rates to its residential and general service customers, and mandatory time-of-day rates for commercial and industrial customers whose monthly demand exceeds 200 kW at least 3 months of the year.
http://citymedfordwi.com/index.asp?Type=B_BASIC&SEC=%7b7AFB91B0-BC09-4F07-B894-2D9B4921815A%7d
- **Menasha Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Menasha also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). Menasha also offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.
http://www.menashautilities.com/business_customers/default.asp?CategoryNumber=6
http://www.menashautilities.com/business_customers/default.asp?CategoryNumber=1
http://www.menashautilities.com/media/Menasha_Rates.pdf
- **New Holstein Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). NHU also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). NHU also gives incentives to install solar photovoltaic systems for all customers. NHU also offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.
http://www.nhutilities.org/business_customers/default.asp?CategoryNumber=1
http://www.nhutilities.org/business_customers/default.asp?CategoryNumber=6

http://www.nhutilities.org/business_customers/default.asp?CategoryNumber=10
http://www.nhutilities.org/customer_services/default.asp?CategoryNumber=5&SubcategoryNumber=2

- **New Richmond Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). NRU also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy).
http://www.newrichmondutilities.com/business_customers/default.asp?CategoryNumber=6
http://www.newrichmondutilities.com/business_customers/default.asp?CategoryNumber=1
- **Oconomowoc Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Oconomowoc also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy).
http://www.oconomowocutilities.com/business_customers/default.asp?CategoryNumber=1
http://www.oconomowocutilities.com/business_customers/default.asp?CategoryNumber=6
- **Plymouth Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Plymouth also offers the Power Profiler for business customers, an online program that creates custom load reports and offers access to energy usage data (Sponsored by WPPI Energy). Plymouth also offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.
http://www.plymouthutilities.com/business_customers/default.asp?CategoryNumber=1
http://www.plymouthutilities.com/business_customers/default.asp?CategoryNumber=6
http://www.plymouthutilities.com/media/2008_0417_rates_2007_electric.pdf
- **The Village of Prairie du Sac (WI)** offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.
<http://www.prairiedusac.net/vertical/Sites/%7B9B4AD25B-1470-4128-8A1E-0DB407531D87%7D/uploads/%7BC5E5B1D0-2F77-4B49-A144-86851F9455D7%7D.PDF>
- **Reedsburg Utility Commission (WI)** charges time-of-use rates to large commercial and industrial customers with monthly demand greater than 200 kW. RUC will also pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). RUC also offers energy management services to help businesses analyze their load and reduce or shift peaks to lower energy costs (Sponsored by WPPI Energy).
<http://www.reedsburgutility.com/Electric/ReedsElectricRates2010.pdf>
<http://www.reedsburgutility.com/Energy%20Efficiency.htm>
- **Rice Lake Utilities (WI)** offers time-of-use rates for commercial and industrial customers. RLU also offers a load management program for customers allowing the utility to cycle their air conditioning and water heater during peak demand periods.
<http://www.ricelakeutilities.com/services.asp>
- **City Utilities of Richland Center (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). The utility also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). They also charge time-of-use rates to large power customers.
http://www.cityutilitiesofrc.com/business_customers/default.asp?CategoryNumber=1
http://www.cityutilitiesofrc.com/business_customers/default.asp?CategoryNumber=5
http://www.cityutilitiesofrc.com/media/Electric_Rates.pdf

- River Falls Municipal Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). RFMU also offers interruptible load credits and curtailable option to industrial customers (Sponsored by WPPI Energy). RFMU also offers optional time-of-use rates for all its customers and a solar net metering rate.

http://www.rfmu.org/business_customers/default.asp?CategoryNumber=1
http://www.rfmu.org/business_customers/default.asp?CategoryNumber=4
http://www.rfmu.org/customer_services/default.asp?CategoryNumber=6&SubcategoryNumber=3
<http://www.rfmu.org/environment/default.asp?CategoryNumber=3>
- Stoughton Utilities (WI)** offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy). SU also offers the Power Profiler for business customers, an online program that creates custom load reports and offers access to energy usage data (Sponsored by WPPI Energy). SU also offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.

<http://www.stoughtonutilities.com/pricingoptions.aspx>
<http://www.stoughtonutilities.com/powerprofiler.aspx>
<http://www.stoughtonutilities.com/rates.aspx?category=residential>
<http://www.stoughtonutilities.com/rates.aspx?category=commercial>
- Sturgeon Bay Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). SBU also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy). SBU also charges time-of-use rates to large power and industrial customers.

http://www.sbunet.com/business_customers/default.asp?CategoryNumber=7
http://www.sbunet.com/business_customers/default.asp?CategoryNumber=1
http://www.sbunet.com/customer_services/default.asp?CategoryNumber=6&SubcategoryNumber=1
- Sun Prairie Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). SPU also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy). SPU also offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 200 kW.

http://www.spwl.net/business_customers/default.asp?CategoryNumber=1
http://www.spwl.net/business_customers/default.asp?CategoryNumber=7
<http://psc.wi.gov/pdf/tariffs/ele/5810.pdf>
- Two Rivers Water & Light (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Two Rivers also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy).

http://www.trwaterandlight.com/business_customers/default.asp?CategoryNumber=1
http://www.trwaterandlight.com/business_customers/default.asp?CategoryNumber=6
- Waunakee Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Waunakee also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy).

http://www.waunakeeutilities.com/business_customers/default.asp?CategoryNumber=1
http://www.waunakeeutilities.com/business_customers/default.asp?CategoryNumber=5
- Waupun Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI

Energy). Waunakee also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy).

http://www.waupunutilities.com/business_customers/default.asp?CategoryNumber=1

http://www.waupunutilities.com/business_customers/default.asp?CategoryNumber=7

- **Westby Utilities (WI)** will pay commercial and industrial customers who make a backup generator available as a generating resource during peak demand periods (Sponsored by WPPI Energy). Westby also offers interruptible load credits and curtailable option to commercial and industrial customers (Sponsored by WPPI Energy). Westby also offers a solar PV buy-back program and renewable energy incentives. They also offer optional time-of-use rates for residential customers.

http://www.westbyutilities.com/business_customers/default.asp?CategoryNumber=1

http://www.westbyutilities.com/business_customers/default.asp?CategoryNumber=5

http://www.westbyutilities.com/energy_efficiency/default.asp?CategoryNumber=3&SubcategoryNumber=7

http://www.westbyutilities.com/customer_services/default.asp?CategoryNumber=2

- **Water Works & Lighting Commission (Wisconsin Rapids, WI)** offers optional time-of-day rates to residential and commercial customers and mandatory time-of-day rates for large commercial and industrial customers with monthly demand over 400 kW for at least 3 months of the year.

<http://www.wrwwlc.com/electricRates.aspx>

- **WPPI Energy (WI)** offers grants to large commercial and industrial customers that come up with innovative methods to improve energy efficiency or reduce peak demand use. Projects with energy savings of at least 150,000 kWh or peak demand reductions of at least 25 kW can be submitted by customers to WPPI Energy's RFP for Energy Efficiency.

<http://www.wppienergy.com/newsarchive?ID=191>

Other Resources on Demand Response:

- Energy Efficiency Resource Central on the APPA website includes a database of energy efficiency projects by member utilities. This includes demand response, Smart Grid, and smart metering programs.
<http://www.appanet.org/utility/utility.cfm?ItemNumber=21923&navItemNumber=21021>
- The DEED Project Database on the APPA website lists all their on-going and recently completed projects. Several of the projects involve testing demand response programs, such as thermal energy storage and cycling appliances, and innovative marketing of demand response for consumers.
<http://www.appanet.org/applications/deed/index.cfm>
- The Department of Energy Office of Electricity Delivery and Energy Reliability has information on what demand response is, how different regions of the country are working to achieve it, links to other websites, and a report entitled “Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them.”
<http://www.oe.energy.gov/demand.htm>
- The Demand Response Coordinating Committee has many resources about demand response and energy efficiency on their website. They also host town meetings and webinars on different topics related to demand response.
<http://www.demandresponsecommittee.org/index.htm>
- The Federal Energy Regulatory Commission includes a page on their website about demand response with links to several national assessments on demand response and smart grid. FERC has also released its National Action Plan on Demand Response for 2010, available in PDF form on their website.
<http://www.ferc.gov/industries/electric/indus-act/demand-response.asp>
- The ISO New England has resources on its webpage, including demand response statistics, a list of demand response service providers, brochures and customer tools, and more.
http://www.iso-ne.com/genrtion_resrcs/dr/index.html
- The Demand Response and Smart Grid Coalition is a trade association for companies that develop DR and Smart Grid technology. Their website includes a resources section with information on demand response and Smart Grid.
<http://www.drsgcoalition.org/resources/index.html>
- Smartgrid.gov is a government-run website listing all the Smart Grid projects being funded by ARRA stimulus funding. Many of these projects also involve demand response.
www.smartgrid.gov
- The North American Electric Reliability Corporation has resources on demand response as part of their mission to ensure the reliability of the power system. They collect data on “controllable” demand response programs throughout the country.
<http://www.nerc.com/index.php>
- The Demand Response Research Center works to advance demand response in California through multi-disciplinary research. Their website has information on current projects, links to publications, and assessment tools.
<http://drcc.lbl.gov/drcc.html>

- Demandresponseinfo.org offers a database of documents and information on demand response, smart grid and other related technologies.
<http://www.demandresponseinfo.org/>
- Berkeley Labs conducts projects testing different demand response program designs and evaluations of DR. Their website also has a link to publications on demand response written by the lab.
<http://eetd.lbl.gov/ea/ems/drlm.html>
- Flex Your Power is an energy efficiency marketing and outreach tool in California. The program includes Flex Alerts, an alert system used by the California ISO to ask customers to reduce energy use in emergency situations, including very high demand. Their website also includes a listing of all DR programs in California.
<http://www.fypower.org/>
- Wisconsin's Focus on Energy program is a statewide energy efficiency initiative that helps residents, businesses and utilities implement cost-effective energy efficiency and renewable energy projects, including demand response. Their website offers more information on programs in Wisconsin.
<http://www.focusonenergy.com/Default.aspx>
- The California Public Utilities Commission regulates all investor-owned-utilities and utility services in California, but their regulatory decisions also impact public power utilities. Their website includes information on topics like smart grid, distributed generation, and demand response.
<http://www.cpuc.ca.gov/puc/>
- DSIRE (Database of State Incentives for Renewables and Efficiency) is an online database of current federal, state and local programs and regulation related to renewable energy and energy efficiency.
<http://www.dsireusa.org/>