

Energy Watch test cuts load

Electric and gas customers throughout Southcentral cut their energy demand by about 2-4 percent during a recent test of the "Energy Watch" system. The test was organized and promoted by the Municipality of Anchorage as a way to help area residents understand how they could help take {28793} pressure off the natural gas delivery system in the event of an emergency. The test asked people to take the actions listed in the yellow area of a "stoplight chart" that would be used to request voluntary curtailments if there was a future problem

getting natural gas to customers. During the 6 to 8 p.m. test window, customers were asked to turn down thermostats and water heater settings, minimize the use of gas for cooking, postpone doing laundry and dishes, and turn off unused lights and electronics. Since natural gas is the primary generation fuel for electricity in Southcentral, cutting electric

| Energy Disruption Customer Action Plan | | |
|--|---------|---|
| CONDITION | MEANING | CUSTOMER ACTION |
| Green | Stable | Use energy wisely; be conservation minded Your utilities can provide tips on saving energy |
| Yellow | Caution | Set thermostat to 65 degrees in living areas, and 40 in the garage Lower water heater setting to "warm" or "vacation" Minimize usage of natural gas range Postpone doing laundry and dishes Turn off unnecessary lights and electronics |
| Red | Alert | Set thermostat at 60 degrees in living areas (55 if away) Turn water heater gas valve to "pilot" Do not use natural gas fireplaces, decorative heaters or gas grills Consolidate household activities into as few rooms as possible Use the microwave for cooking |

consumption helps reduce the amount of gas needed for power production. As this issue of the Outlet went to press, utilities were continuing to analyze the data

from the exercise. For more on the Energy Watch program, go to www.chugachelectric.com.

Southcentral clouds have a silver lining

Hydro project reservoirs fill before winter

The steady series of storms off the North Pacific Ocean and the Gulf of Alaska that move into Southcentral Alaska each fall provide a dreary signal that summer is over for many residents. However, they also

bring an important benefit to the electric system. The rainfall from storms in September and October provides a significant infusion of water for hydro projects.

Three major hydroelectric projects

are linked to the Railbelt, and all are in Southcentral. The largest is the state-owned Bradley Lake project at the head of Kachemak Bay near Homer, with 126 megawatts of installed capacity.

Next is the 47-megawatt Eklutna hydroelectric project between Anchorage and Palmer. Eklutna is jointly owned by Anchorage Municipal Light & Power, Chugach and Matanuska Electric Associa-

See page 2, Silver lining

O'Malley Road power line project update

A major power line project along O'Malley Road continues to make good progress. The project will add a segment of new 138-kilovolt transmission line to complete a loop tying all three of Chugach's Anchorage Bowl transmission substations together. Looping the transmission substations will improve the reliability of the transmission system and enable Chugach to better serve the growing load in South Anchorage.

To make way for the new overhead transmission line, existing overhead 12.5-kv distribution lines were replaced with new

underground cables. Also placed underground was a new circuit of 34.5-kv subtransmission line to provide a link between distribution substations. The distribution overhead-to-underground work, and a portion of the new 34.5-kv circuit, were funded by the 2-percent charge on utility bills in the Municipality of Anchorage to raise money for conversion projects in accordance with a municipal ordinance.

As of October the project was more than 50 percent completed. Electrical construction is expected to be done by the end of the year, although cleanup and restoration may continue into 2010.



Poles have been set along O'Malley Road for the new 138-kv transmission line. To minimize the impact on private property (a neighborhood goal expressed during the years-long public process prior to construction) poles are located in the road right-of-way with all three conductors on the road side of the pole, thereby reducing the need for additional easement on adjoining properties. In this photo, taken alongside the Anchorage Golf Course near Elmore Road, the 12.5-kv electric lines and cross arms have already been removed from the former overhead distribution poles on the right. The shortened poles now hold only the telecommunications lines. Conduit for new underground telecommunications circuits were installed in the same trench where the new underground electric lines were buried.

tion. The third is Chugach's Cooper Lake hydro project, with 19.2 megawatts of installed capacity at the power plant on the shore of Kenai Lake.

The water level at the Bradley Lake, Cooper Lake and Eklutna projects rises and falls in a predictable and regular pattern each year. Breakup and spring runoff begin the process of refilling reservoirs. Throughout the summer warm temperatures and sunshine continue to melt the snowpack. The snowpack provides an important source of water – annually accounting for about a third of the supply for Bradley Lake for instance. However it's the fall storms that really provide an impressive inflow in a short amount of time.

Some autums are better than others. This was a good one. The inflow to all three hydro projects has exceeded their project averages.

Between Sept. 1 and Oct. 21, the water level in the reservoir at Bradley rose from 1165 to 1178 feet above sea level. That 13-foot gain represents enough water to generate 47,000 megawatt-hours of electricity (enough to power 67,000 homes for a month). The Eklutna project saw similar gains.

Cooper Lake didn't receive as much water as the other two projects, but still enough to enter the winter with a good supply in the reservoir.

Annually the kilowatt-hours produced from the three hydroelectric projects accounts for about 10 percent of the power Chugach sells. The other 90 percent comes from natural gas-fired generation. The reservoirs do not have enough capacity to use hydro power as base-load generation as they do in the Pacific Northwest. The Railbelt's hydro projects greatest value is in following the load curve up or down until it is economic to efficiently add or take offline a gas turbine.

Hydropower may be extra-valuable this winter. Planners have identified it as a key component of the response plan in the event of a gas shortage. In the event there's a problem with the gas delivery system this winter, electric utilities could increase production from hydro projects to reduce the amount of gas needed for power generation for a short time.

If that response is necessary, the extra water gained from recent rains will be very much appreciated.



The reservoir at the Bradley Lake hydro project rose 13 feet in 7 weeks this fall.

Have you noticed a streetlight that is not working?

As winter and darkness approaches, the need for working streetlights increases. If you see a streetlight that is not working call the Municipality of Anchorage Streetlight Department at

343-4557. Streetlights are owned and maintained by different entities, but the Municipality will determine who is responsible and notify the proper agency.

The Smart Power program now has its own Web site.



www.smartpowerak.com

Give the Gift of Light

If you need a useful gift for a hard-to-buy-for person, or maybe a gift for a charity, consider giving the "Gift of Light." Chugach gift cer-

tificates are available year-round in any amount. Call Member Services at 563-7366 for more information.

Member number hide-n-seek

Your member number could be worth a \$100 credit on your Chugach electric bill.

If you find your member number,

call Chugach's service center at 563-7366 to claim your prize. You may win for either the current or immediate past month's issue of the Outlet.

Contact us

Main number 563-7494
Toll free (800) 478-7494
Member Services 563-7366
Member Services fax 762-4678
24-hour payment line 762-7803
Credit 563-5060
Power theft hotline 762-4731
Danger tree hotline 762-7227
Street light hotline 762-7676
Underground locates 278-3121
Regulatory Commission of AK (800) 390-2782
or 276-6222
To report a power outage
In Anchorage 762-7888
Outside Anchorage (800) 478-7494

Hours

Main office:
Monday - Friday
8 a.m. - 5 p.m.

Member Services lobby: 5601 Electron Drive
Monday - Friday
8 a.m. - 6 p.m.

Member Services phone:
Monday - Friday
8 a.m. - 6 p.m.

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Monthly residential service costs (based on 700 kwh)

| | |
|--|-----------------|
| Customer charge/month | \$ 8.00 |
| Energy charge \$0.07181 x kwh = | \$50.27 |
| Fuel \$0.05330 x kwh = | \$37.31 |
| Purchased power \$0.00452 x kwh = | \$ 3.16 |
| <small>(Fuel & purchased power adjustments effective 10/1/09 - 12/31/09)</small> | |
| Subtotal | \$ 98.74 |
| 2% MOA Underground Charge = | \$ 1.97 |
| RCC charge \$0.000432 x kwh = | \$ 0.30 |
| Total bill | \$101.01 |

Personnel policy

"It is a policy of Chugach Electric Association, Inc., to recruit, hire, train, compensate and promote persons without regard to race, color, religion, national origin, sex, marital status, pregnancy, parenthood, disability, veterans status, age or any other classification protected by applicable federal, state, or local law." Chugach is also an affirmative action employer."