COMMERCIAL CUSTOMER
News
FROM CHUGACH ELECTRIC

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Southcentral Power Project

Efficient combined-cycle power plant to be fully operational in 2013

Work continues on the Southcentral Power Project under construction at Chugach's headquarters near Minnesota Drive and International Airport Road.

SPP will have three natural gas-fired turbine-generators and one steam turbine-generator. The units will operate in combined-cycle mode, meaning the hot exhaust from the gas turbines will be captured and used to make steam for the steam turbine. The plant will use only about three-fourths of the natural gas needed to make a kilowatt-hour compared to the best units on the Chugach system today, leading to millions of dollars in fuel savings annually once the plant is started up in 2012 and fully-operational in 2013. Using less gas will also reduce the demand on the natural gas delivery system during times of peak usage.

The new power plant's black start diesel generator package being set onto its foundation

Alaska Crane's 600 Ton crane lifts the last large boiler assembly into place for SNC Lavalin

Gas contingency plans in place

Chugach - along with other utilities, the Municipality of Anchorage and the Matanuska-Susitna and Kenai Peninsula boroughs - has updated plans to deal with possible gas supply emergencies during the winter of 2011-12. The current effort builds on the successes and lessons of the past two winters of the Energy Watch program.

Chugach has disaster plans in place and planning for emergencies in fuel supply disruptions are part of that overall plan.

There are two main components to the natural gas issue: supply and delivery. While most utilities have secured adequate supplies of natural

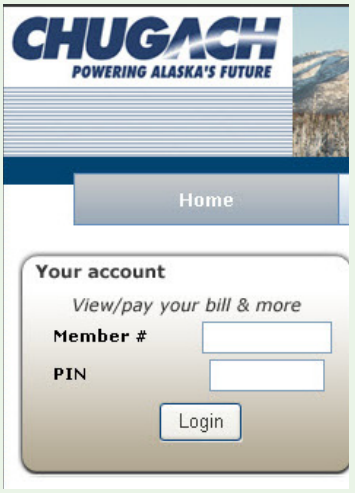
See Energy Watch, page 2

Chugach Website: A Tool for Business

Have you checked your company's Chugach account online lately? If not, you may be missing out on helpful tools to monitor your company's costs and consumption for all your metered accounts – all in one place. From Chugach's homepage, www.chugachelectric.com enter your member number and PIN to gain access to your latest monthly statements, usage history and payment history. If you don't have a PIN, contact Member Services by calling 563-7494.

Once logged in, members can access three years of history including a graphing feature for both usage and demand, found within the 'Usage History' section. The graphs can help you see visually what times of the year your usage is peaking and falling to help you identify trends and opportunities to reduce your consumption. If you are a demand account, this could prove extremely valuable (see Demand article on page 2). Logging in online also gives you the opportunity to download your usage history to a spreadsheet to create your own customized graphs and charts.

Remember, visit chugachelectric.com to see billing statements, pay bills, view history and monitor your peak usage. If you need further assistance, contact Member Services at 563-7494.



For Large General Service members, demand matters

If you pay a "demand" charge on your account (rate classes 301,304, 306, 307, or 308), this article is for you. Unsure of your rate class? Find the number located on the upper right hand corner of your bill, next to "Company Read". For an explanation of demand charge and how you can help control your costs, continue reading.

More than 1,400 Chugach members fit into the large general service category with commercial and industrial operations requiring more than 20 kilowatts of power on a regular basis. Due to this higher electrical demand, compared to small general service and residential members who use less than 20 kW, the rate design includes a demand charge on their account(s). Residential and small general service commercial customers (rate classes 101 & 201) also experience demand peaks, but individually they are relatively small peaks compared to the large general service customers. Therefore they are not charged for demand separately. Rather associated demand costs for these rate classes are included in their 'energy charge' and are recovered in aggregate.

What is demand?

Demand (measured in kilowatts or kW) is the rate at which electricity is used at any one given time, as opposed to energy (measured in kilowatt-hours or kWh) which reflects the amount of electricity that is consumed over time. For example, if a large commercial business has all the following components: 5 kW water pump, 10 kW air compressor, 5 kW walk-in refrigerator, 5 kW of lighting, then it has a total of 25 kW of potential power use. If the business turns on all four of these components full power at once, the demand rate of consumption will peak to 25 kW the moment everything is turned on. Also, if all systems operate for 2 hours, then the amount of electricity consumed is 50 kWh or kilowatt-hours (25 kW x 2 hours). If this business is in the 301 rate class and it was hypothetically billed for this 2-hour period only, then the charges (does not include fuel/purchased power costs) would be as follows:

(25 kW x demand charge of $11.48 per kW = $287.00) + (50 kWh x energy charge $0.02496 per kWh = $1.25) = $288.25 total

However, if the business had turned on everything except the 10 kW air compressor, or used the compressor at a different time, the bill would be significantly less, because the peak demand would be a lot lower. (15 kW x $11.48 = $172.20) + (30 kWh x $0.02496= $0.75) = $172.95 total.

Why is there a demand charge?

While customer load levels vary throughout the month and year, Chugach must have the generation, transmission and distribution infrastructure to meet the maximum demand of our customers, whenever it is required, as illustrated in the example. Demand charges are designed to recover each customer's share of Chugach's cost of owning these facilities. The remaining costs are collected through the energy charge.

How is demand determined?

Chugach's commercial meters are able to measure both demand (the rate of use) and energy (the amount of use). These meters are used for all customers whose demand consistently exceeds 20 kW. The meters monitor demand in 15-minute intervals on a continuous basis and record the highest average demand which occurred in any 15-minute interval during a monthly billing cycle. Your monthly demand charge is determined by multiplying the charge per kW by the highest average demand in any 15-minute interval as recorded by the meter. Your demand charge may vary from month to month, and you can easily monitor any efforts you may make to reduce your demand charge.

How can I manage demand costs?

Generally speaking, you can manage demand costs by scheduling times of the day when your electric usage is lowest to run equipment that uses the most power, again as illustrated in the air compressor example. You may want to pay special attention to equipment such as water heaters, welders, 5-horsepower and larger motors, electric heat and commercial appliances. Use thermostats, relays, timers, on/off switches, and circuit breakers to shut down non-essential equipment and lights before starting equipment which draws a large amount of power. Relays or timers can prevent two large loads from being on at the same time.

Most equipment has an identification/model number tag that also lists the kW of demand. Some tags may only list the amperage (amps) and voltage the equipment uses. You can still use this information to figure the approximate usage rate in kilowatts. Just multiply amps by volts and divide by 1,000.

If you have questions about demand charges or ways to manage your demand, contact Chugach's Energy Efficiency and Conservation Specialist at 762-4336 or smartpower@chugachelectric.com.

Energy Watch, (cont'd from page 1)

gas to meet their needs, there could come a time when the existing system simply cannot move as much gas as customers demand at a given point in time. The steps in the Energy Watch program are designed to take pressure off the gas delivery system.

The system operators at gas production facilities, gas and electric utilities have a number of tools they can use to compensate for changing conditions. However, there could be times when system operators might need the help of the public to reduce the demand for gas. If so, government officials would issue a public appeal using a color-coded chart that recommends specific actions consumers can take to cut gas consumption. Though this chart is geared towards residential usage, there are several things that commercial customers can do to reduce gas usage.

Suggestions are:

- Set thermostats to 65 degrees in working areas, and 40 in warehouses or garages.
- Turn off unnecessary lights and electronics.
- Turn off lighting in parking areas and exteriors of buildings.

As in prior years, the Energy Watch chart will be tested during a tri-borough conservation excercise. The test will take place between 6 - 8 p.m. , Wednesday, Oct. 19.

More information about the Energy Watch program is available at utility websites, including www.chugachelectric.com.