# Outlet

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**Employee Profile:** Mary Medeiros McEnroe

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# **Rate Increase to Maintain and Advance Reliable Power System**

On Dec. 6, 2022, the City Council approved a 8% rate increase for Silicon Valley Power customers effective Jan. 2023. The 8% rate increase is needed to cover the increased cost of generating and delivering power to Santa Clara residents and businesses. Generation, transmission and distribution costs are the largest expenses for the utility and are expected to increase much more than previously anticipated. This increase in costs, along with pressures from inflation, drive a need for the rate increase.

The projected increase in electric distribution costs reflects a 25% increase in electric transmission rates the utility pays to use the transmission system to move power from remote generation facilities to the local power grid. It also includes a 36% increase in natural gas transportation rates for the delivery of fuel to gas-fired power plants.

The rate increase will add approximately \$2.7 million per month in revenue for calendar year 2023 to help cover the increased utility operating expenses. This funding is necessary to maintain the current level of service, help fund capital improvement projects needed to update aging infrastructure and increase renewable energy generation to meet State and local climate mandates.

Silicon Valley Power offers free energy assessments and a wide variety of energy efficiency programs to help businesses reduce their electricity usage and costs. For more information on available programs, visit SiliconValleyPower.com/BusinessRebates.

# **Is Your Maintenance Program Energy Smart?**

A good preventive maintenance program is key to optimizing equipment performance and service life. Proper maintenance can also reduce your operating costs by increasing system energy efficiency, but where do you start? Lighting and HVAC systems account for between 60%-75% of energy use in commercial buildings. The time you take to inspect, clean and maintain these systems will more than pay for itself in lower energy bills all year long. Now that's smart business.

### Lighting

Effective lighting maintenance can reduce your energy costs, improve productivity and enhance visibility. Best practices include:

- Clean the dust off fixtures, lamps and lenses every six to 12 months. Fixtures can lose up to 20% of light output from this dust.
- Clean or repaint small rooms every year and larger rooms every two to three years. Dirt collects on surfaces, which reduces the amount of light they reflect.
- Replace lights in groups. LED lamps can lose up to 30% of light output over their service life of 35,000-50,000 hours. Group replacement saves labor and helps keep illumination levels high.
- Make sure lamps and fixtures are compatible. Installing new fixtures with new lamps increases energy efficiency and service life.

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• Periodically test light levels to ensure they match the space and tasks being performed. The Illuminating Engineering Society provides lightlevel recommendations.

**HVAC** systems

A preventive maintenance program can save on energy costs and keep building occupants comfortable - and productive - all year long. Key elements include:

- Hire a qualified professional to clean and inspect your HVAC system equipment at least once a year.
- Inspect seals, valves, pipe joints and instrumentation for leaks and make repairs when needed.
- Check gauges and other instrumentation to ensure that they're in line with building maintenance policies or manufacturer's recommendations.



## **Is Your Maintenance Program Energy Smart?** continued from the front cover

- Be sure all dampers and linkages are connected and opening and closing as intended.
- Clean heat transfer coils and replace filters as needed.
- Inspect motors and check belts regularly for tightness.
- Make sure the cooling system is charged with the right type and amount of refrigerant; too much or too little can increase operating costs. Be sure to monitor for leaks after recharging.
- Clean and recalibrate mixed-air and supply-air sensors regularly to ensure they match occupancy schedules and building conditions.

#### **Continuous improvement**

A preventive maintenance program that optimizes energy savings is more than just a checklist of items. Leadership, training and documentation are necessary to tie everything together and ensure continuous improvement.

Leadership. Appoint a staff member to provide guidance in energy-efficient maintenance practices and how they fit into the overall energy management program. Clearly define the job function and establish the proper authority and reporting guidelines.

Training. Keep maintenance staff up to date on energyefficient maintenance practices and policies. Educate the entire staff on ways to conserve energy throughout the facility.

**Documentation**. Maintain updated information about equipment inspections and repairs. Measure and record energy use for specific equipment. Tracking energy use over time can help you spot and address inefficiencies.

Coordinate your preventive maintenance program with your overall energy management plan. Review maintenance policies when considering equipment upgrades or a building redesign.

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# **LED Lighting Improves Worker** Performance

LEDs are highly efficient and they last longer than conventional lighting technologies, saving on energy and maintenance costs. That's great, but studies also show LED lighting can improve employee mood and overall work performance. An LED upgrade can thus brighten your bottom line in more ways than one.

#### The benefits of LEDs

The market for LED lighting is growing and the technology is advancing rapidly. The latest generation of LED products include a number of features and characteristics that can benefit your business:

•High energy efficiency

•Long rated life (up to 50,000 hours or more)

- Improved light quality for bright, vivid lighting
- Inherently dimmable for use with daylighting controls
- •Instant-on capability for compatibility with occupancy or timer controls
- •Color tunable (available in a variety of color temperatures or tones)

#### LEDs and productivity: what the research says

LED upgrades can do a lot more than just reduce your energy bills. Research has shown LED lighting can have a positive impact on worker performance and some of the aspects that contribute to it – such as mood, comfort and visibility.

One study compared fluorescent lighting and advanced LED lighting in terms of visual acuity, perception and other measures affecting worker performance. LEDS:

- •Improved visual and cognitive tasks by 8%
- •Reduced fatigue and increased activity
- Lowered reaction times

The researchers concluded "relative to traditional fluorescent technology with relatively low color temperature, LED appears to support positive mood, extended wakefulness and faster performance on both visual perceptual and cognitive tasks."

Another study identified a 33% increase in mood ratings when lighting simulated daylight using dimming and color tuning. This mood increase would translate into a 6% improvement in overall work efficiency.

#### **Take action**

It's clear that LEDs can help make your workplace shine. Here's what you can do:

- •Replace conventional lights with high-performance LEDs and start realizing their benefits in energy efficiency, long life and improved light quality.
- Install occupancy and dimming controls to save energy and create a more comfortable visual environment.
- •Use the color tuning capability of LED lighting to affect the mood and and productivity of workers.

Make sure the LED light products you choose meet DesignLights Consortium quality standards. Work with a lighting professional to find the right type of lighting for your application.

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# **Valley Village Retirement Community Reinvest in Senior Community through Electric Bill Savings**

Valley Village Retirement Community recently contracted with a contractor through the Silicon Valley Power Trade Ally to implement a comprehensive LED lighting project at its property. The project included upgrades to approximately 800 interior and 300 exterior lighting areas.

Existing fixtures that included fluorescent T8s, CFLs, metal halide and high-pressure sodium fixtures were retrofitted with new LED fixtures and retrofit kits. The project upgraded lighting in the common areas for Valley Village's residential and support buildings. Areas upgraded include the dining room, kitchen, staff office spaces and hallways. Lighting was also upgraded for building exteriors, pedestrian walkways and parking lots, providing better outdoor lighting and improving safety for residents.

The contractor assisted Valley Village in preparing an application for Silicon Valley Power's Lighting Rebate program and Valley Village received a rebate of just over \$25,000. Thanks to the energy savings from the lighting retrofit, Valley Village is saving approximately 167,000 kWh annually, which equates to about \$31,000 that it can reinvest into the services it provides to senior citizens.

Valley Village shared contractor made the rebate process easy. "They took care of the whole process. They provided us with a proposal and worked with the utility's energy engineers to apply for the rebate. All I had to do was sign the application," said Administrator, Liz Ayala. "They were very professional during the installation and were patient with residents as they moved throughout the facility. At the end of the project, we received a check from Silicon Valley Power that we are putting back into the facility to make improvements for the residents."



# **Mary Medeiros McEnroe** Public Benefits Program Manager

**Background:** Mary has worked for the City of Santa Clara for over 27 years, starting as a Customer Service Representative in the Municipal Services Division of the City's Finance Department. In 1998, she shifted into a Key Customer Representative position in the Electric Department, newly named Silicon Valley Power (SVP). She then worked her way up to her current role as a Public Benefits Program Manager. In this role, she is responsible for the programs funded by the state-mandated Public Benefits Charge including energy efficiency, renewable energy, low-income and research and development programs and she has expanded the programs to include building electrification.

**Comment:** "I get excited about the opportunity to help customers, whether it be through designing programs to help customers save energy and reduce their electric bills or developing outreach and educational programs."

**Favorite pastime:** In her free time, Mary enjoys flying small airplanes. She's a private pilot and loves volunteering for Pilot N Paws, a nonprofit that assists in transporting animals from shelters to foster or forever homes.

Working at SVP: Mary appreciates the relationships she's built with her customers and colleagues at SVP. She enjoys using her problem-solving skills to create programs that make a real impact in her community.