

Fall 2019 | Volume 3, Issue 4

Remembering Shauna Sorrells

Watts Hot Newsletter™ is remembering Shauna Sorrells, a member of the housing industry and HUD family. Shauna was a member of the housing Industry and HUD family. Shauna passed away unexpectedly on Sunday.

Shauna began her career at HUD in PIH's Office of Policy, Programs and Legislative Initiatives, later becoming the Director of the Office of Public Housing. In that role, Shauna increased the number of families housed by the Public Housing program by 33,000 and played a key leadership role to expand the Rental Assistance Demonstration (RAD) program.

She created new initiatives and partnerships to expand STEM (Science, Technology, Engineering and Mathematics) resources for children and programming for women, and underserved populations in public and assisted housing.

Shauna Sorrells left HUD in 2016 to join the Housing Opportunities Commission of Montgomery County, MD, where she became its Chief Operating Officer. There she managed overarching Federal, State, and local legislative issues, local zoning issues, public affairs, community partnerships, and special initiatives. She also served on the Board of the National Low-Income Housing Coalition.

Many of us were blessed to know Shauna not only as a colleague but also as a friend. I was fortunate to work with Shauna at HUD. She was a loving mother, staunch housing advocate, and kind friend. Shauna was a passionate believer in affordable housing for low-income families, having lived in public housing as a child herself.

We have lost a champion of our cause and a dear friend. Watts Hot Newsletter™ prays for Shauna's family during this difficult time and appreciates her contributions to HUD in the field of public housing.



UPCOMING EVENTS

- » **NAHRO National Conference**
October 10-12, 2019
San Antonio, TX

- » **ACEEE Conference on Energy Efficiency as a Resource**
October 15-19, 2019
Minneapolis, MN

- » **2020 Commissioners' Conference**
January 5-8, 2020
Phoenix, AZ

- » **Novogradac 2020 Affordable Housing Conference**
January 9-10, 2020
Fort Lauderdale, FL

- » **NAHRO Washington Conference**
March 29-31, 2020
Washington, D.C.

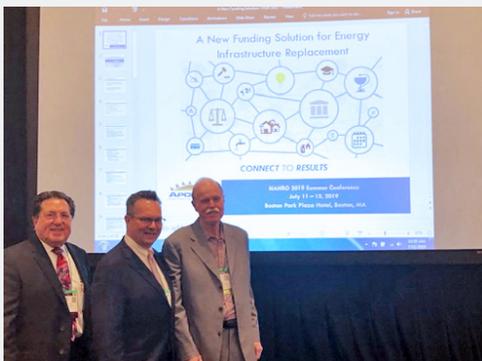
- » **CLPHA 2020 Housing Is Summit Conference**
April 30 - May 1, 2020
Washington, D.C.

NAHRO's Summer Conference in Boston "Hits it out of the Park"!

The 2019 NAHRO Summer Conference, CONNECT to Results, showcased successful initiatives and measurable outcomes in the affordable housing and community development space. Over 25+ informative concurrent sessions full of best practices, case studies and how-tos; housing and community development tours hosted by the Boston Housing Authority and the Cambridge Housing Authority.



Key among the concurrent sessions was *A New Funding Solution for your Agency's Energy Infrastructure* presented on Thursday, July 11th. Attended by over 60 conference participants, the session was presented by Dick Santangelo, Pat Landers and Mike Nail. PHAs need options to assist with repositioning their inventory. "As A Service" may be the flexibility a PHA needs to remain viable.



Faced with rising utility and deferred maintenance costs, and limited capital funds, how can a PHA reduce utility costs and replace, upgrade energy capital infrastructure (elevators, roofs, etc.)? A pioneering solution is emerging within the energy rehab industry, fueled by new cloud-based technology and innovative capital financing. The solution – a utility-based usage approach where a third party owns, operates, maintains and is responsible for the energy saving performance of the new equipment. The PHA relies on the operating budget to pay a service fee; and, there is no debt. The result is a flexible, non-debt solution that addresses energy infrastructure replacement and preserves savings-scarce resources for core PHA business functions. Unlike traditional time-consuming

funding alternatives, this approach can address important replacement issues quickly. And, like a utility service, the PHA customer is charged only for the utility it uses.



This new, win-win approach "as a Service", which has been reviewed by HUD, is useful for PHAs with an existing energy performance contract (EPC); may be going to RAD or who have converted to RAD; or who need to address immediate serious capital energy replacement items like elevators, roofs, boilers or chillers that could not be addressed by a traditional EPC or capital fund dollars.

Those that came to the session, heard about other public agencies that are looking into this approach and learned how their PHA can take advantage of this new break-through funding solution to meet an agency's important energy infrastructure needs with no debt or use of capital funds. The full session presentation is available on <https://www.apolloengineeringsolutions.com/resources.html>.

Enlightened Enterprises, Inc. Unveils New Website, New Services, New Team Member

Apollo's business partner, Enlightened Enterprises, Inc. (Michael Nail, CEO) just unveiled its comprehensive new website and have added exciting new services and a new team member, Pat Landers. The new website is at <https://enlightenedenterprisesinc.com> and includes information about Enlightened's two divisions, Enlightened Energy Consultants (EEC), which offers independent energy advice and assistance and Enlightened Energy Solutions (EES), which provides innovative energy saving products and services.



Nail, in unveiling the new website said, "Our mission and our success are based upon our commitment to our clients that they will continue to receive the most comprehensive, holistic, resilient, sustainable and innovative business solutions, including energy-saving strategies and support." Although our focus is primarily on energy-related matters, we are also offering new services to help public agencies adapt to the changing demands of a fast-paced, technology-focused industry – one that serves people. Those new services include off-balance sheet infrastructure financing solutions and customized consulting. "Working with Apollo Engineering Solutions, we have also added Pat Landers to our team who brings enormous financial experience and expertise to our clients," said Mike Nail.

Customized Consulting Services

In these uncertain times, it is always helpful to have another set of experienced eyes to help you better understand your options and develop strategies to better position your organization to grow and prosper. Our team of highly talented and experienced consultants can help you ensure that your organization can adapt and grow in this rapidly changing business environment and is operating at peak performance levels.

Based upon feedback from our clients, these six consulting areas can help you the most in positioning your agency to succeed:

- Operational Efficiency Analysis and Solutions
- Strategic Planning
- Income Diversification Strategies
- Energy Resiliency Analysis and Solutions
- Syncing Staffing with Strategic Goals
- Managing Complex Tasks and Organizations



Pat Landers – *Financing Advisor*

Pat assists the Enlightened-Apollo Team by providing his considerable financing expertise, analysis, and advice to our public sector clients interested in pursuing alternative financing approaches including SaaS. Pat has an established background in government and public finance serving states, state-level authorities, housing authorities, public utilities, not-for-profit hospitals, higher education, and K-12 school systems.

Pat's significant governmental experience also includes having served as Massachusetts' Assistant Treasurer for Debt Management, where he issued over \$34 billion of municipal bonds, most notably for the Central Artery/Third Harbor Tunnel Project, the Boston Exhibition & Convention Center and to establish the Massachusetts School Building Authority. Pat served on Massachusetts's Financial Advisory Board and was the Treasurer's designee as Chairman of the Executive Committee of the Massachusetts Water Pollution Abatement Trust. Pat was also an elected Massachusetts State Representative, serving 7 terms from the 1st Hampden District.

Elevators Got You Down?

Multifamily building amenities such as elevator systems are sometimes taken for granted. What goes up, must come down, and vice versa, right? But elevators are not just for convenience and awkward silent moments, they also accommodate residents unable to climb stairs, and are critical for deliveries and facilitating maintenance workers. At a certain point, no matter the age of the building, the elevator system will need maintenance and/or replacement. The key is identifying signs of wear and tear before a breakdown occurs. A new elevator needs to be treated like a new car in that it should be properly maintained and lubricated monthly. A well-maintained elevator should last anywhere between 15 and 20 years; however, depending on the elevator application, certain major parts might need to be changed in the interim.



Even if a building owner is diligent with elevator maintenance protocols, there may come a time when the equipment becomes unreliable and the down time is increased. The resulting work required could be an upgrade or an overhaul. Any modification to an existing system is a modernization, which can be partial or full. A job is considered new construction when new rails are added to an existing job, or it is installed from the ground up. Hydraulic elevators typically last between 25 to 30 years. Traction applications have controllers that last 25 to 30 years, although the machinery may last even longer. The life span of elevator ropes are typically 10 to 15 years.

The determining factor in whether to keep repairing or replace an elevator is straightforward. If the equipment goes beyond the manufacturer's lifetime expectancy, that is when you want to change equipment. Much beyond that, it becomes more expensive to just keep repairing the old equipment. The typical life span of an elevator is about 25 years, but it depends on several variables.

Government Oversight

Since it's not a question of "if" an elevator will need maintenance, but "when" it will require service, it is always best to be proactive instead reactive. While this includes yearly inspections by certified professionals, when the time comes to make a change, the city gets involved. For example, in New York City, The New York City Department of Buildings' Elevator Division oversees the replacement of all elevator's processes. The elevator company files for a permit detailing the scope of work, code references for each item and layout drawings of the project. These submissions are reviewed and if acceptable, a permit for the work is issued. When the project ended a complete safety test and inspection is performed by the Department of Buildings with the elevator company to ensure all work was performed as listed in the permit and the elevator meets all code requirements.

Depending on what the problem is will dictate if the elevator will be modernized or replaced. In both cases, the undertaking is expensive and time consuming. Regarding the age and condition of an elevator, a modernization can be required to pass Department of Buildings' mandated annual safety inspections.

Replacing or modernizing an older elevator is recommended to make it safer for its passengers, and to make the device more energy efficient, thus cutting down on energy costs for the building. Elevator line regeneration technology has taken off in recent years. Elevator regeneration product allows energy from a traction elevator system to be returned to the building in overhauling situations. It reduces the overall energy consumption of the elevator and can contribute toward a building's LEED certification. Leadership in Energy and Environmental Design (LEED) is one of the most popular green building certification programs used worldwide. Buildings have a substantial impact on the health and wellbeing of people and the planet. Buildings use resources, generate waste and are costly to maintain and operate. Green building is the practice of designing, constructing and operating buildings to maximize occupant health and productivity, reduce waste and negative environmental impacts, and decrease life cycle costs.

Why is LEED important? LEED recognizes your building as a leader in green building management; healthier indoor space; lower use of energy, water and other resources; and, better for building occupants, the community and the environment.

Elevator Modernization

Total replacement is usually required when replacement parts are no longer available, the equipment has far outlived its life expectancy, or the repairs and additions required to meet current codes make it more cost-effective to replace with a modern type system. All elevators have a maintenance contract, but most times it is an age, an obsolescence issue rather than a maintenance issue.

Depending on the size and scope of the building and its elevator system, there are a wide range of issues related to how old equipment is shut down, dismantled and removed. The way new equipment is brought in, installed, and brought online is equally challenging. The price can vary depending on what features the customer wants to add and what kind of elevator cab they would like installed, and the price tag could go up from there. It is difficult to speculate on costs because there are so many variables, e.g., building usage, rise, equipment, cab finishes, etc. For new installations, architects, engineers, consultants, and the elevator company collaborate to determine the best application for a building's needs and budget.

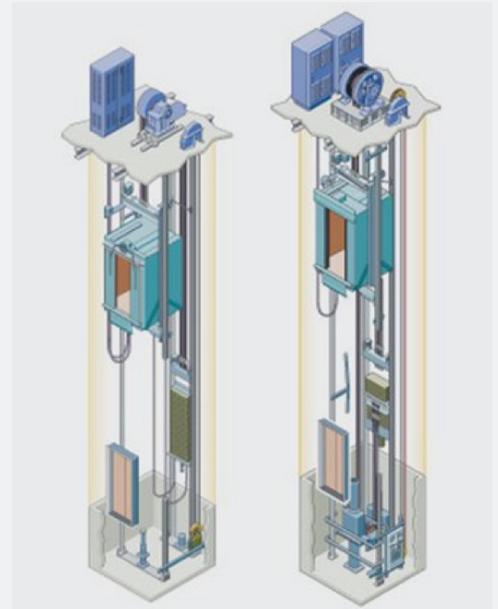


Diagram of a geared traction elevator (left) and a gearless traction elevator (right). Image: Otis Worldwide

Managing Residents' Expectations

If it is determined that elevator maintenance is required, building owners, must prepare residents for the inevitable disruptions and keep them informed as the project progresses. Whether a repair or a replacement project, experts advise providing notice.

Disruptions are a large concern and unfortunately there is no answer. Once the work starts it cannot be placed back in until all work is completed and is inspected, tested and approved. Sometimes buildings will choose an accelerated schedule working six days per week, 10 to 12 hours per day. This can decrease the out-of-service time by three to four weeks, depending on the size of the job. As for job progress, most buildings hire an elevator consultant to write the specifications for the job. This ensures that everyone is bidding on the same scope of work and they will monitor the progress of the job and report to the building. Resident communication is critical when undertaking an elevator maintenance project to manage expectations. With a modernization/replacement project, there typically is a lot of lead time but a repair, especially when safety is involved, can be an emergency when there is not a lot of time for notification. Communication is important so residents know when the project will take place and how long it will take.

When is the best time of the year to undertake an elevator project? That decision is entirely up to the building and it varies. Some want it in the summer because most residents are away. Some do not want the summer because it is too hot to walk the stairs if it is a one-elevator building. To the elevator company, it does not make a difference.

Elevator manufacturers today are producing premium elevators for mid- and high-rise buildings that are extremely energy efficient. These traction elevators have improved controls, hardware, and other systems that not only use less energy, but are much more compact, efficient, and even generate electricity that a facility can use. Manufacturers are now giving more attention to improving energy usage in the other systems such as cab lighting, fans, doors, brakes, and elevator controls.

Watts Hot Newsletter™ would like to recognize and thank Frank Livoti, president of Brooklyn Elevator Inc.; Donald Gelestino, president of Manhattan-based Champion Elevator; Kenneth Breglio, president of the Bronx-based BP Elevator Company for their expertise and contribution; and, W.B. King, a freelance writer and a frequent contributor to The Cooperator.

Recognizing Blind Spots in Your Energy Management Program

We often think about energy management as monitoring the health of our building. The general sense of the word “healthy” indicates routine behavior such as diet and exercise, but it also excludes certain conditions such as injuries and illnesses. When one’s desire is to become healthy, the general expectation will be around two areas: becoming consistently fit and avoiding injury or illness. While both goals are as important, they are achieved through different methods.



Similarly, our buildings work like our bodies. To enjoy an energy efficient building, your overall strategy must address two areas of energy efficiency: The regular routine (automation) and the irregular (anomalies). Each area has its own unique requirements and methods to manage. Addressing only one of the two areas of efficiency—or often just as bad, applying the same strategy to both areas—means you are likely wasting energy. That is leaving dollars on the table.

Three Concepts Affordable Housing Owners Should Be Familiar

Energy Waste: Energy waste occurs when your building is *using more energy than it should* for the present intended operation, and is, thus, wasting dollars. This can be caused by a malfunction, sub-par sequence of Heating, Ventilation, Air Conditioning (HVAC) operation, resident behavior, and many other factors. As electricity is invisible, identifying waste and quantifying the dollar-impact is a complex problem to solve.

Automation (the steady state/regular area of energy): This is the regular or ‘routine’ area of managing consumption. You get this by managing the control systems in the building.

Anomalies (the unexpected/irregular area of energy): This is when energy consumption spikes, or when energy consumption is otherwise behaving differently than usual. An anomaly can indicate an energy-wasting condition, but often not. To better tell if an anomaly is truly a wasteful condition, a deeper dive is needed in normalized consumption trends, Energy Management System (EMS) data, and sequence, business operations, etc.

A Big Problem: Up to 43% in Energy Savings

The Building Owners and Managers Association (BOMA) International Building Energy Efficiency Program (BEEP; BOMA 2006a) reports energy potential savings are 10.5-43.2% through changes in O&M and occupant behavior. This means that between 10.5-43.2% of your energy costs can be avoided and are thus considered waste.

But why so much waste? There are a few factors driving this:

1. Most multifamily buildings are designed with health and safety continuity in mind. So, when a malfunction occurs in a component, usually it will default to “fully-open” status. That way the continuity of health and safety is a default. But it comes at the cost of wasting energy. Take for example an aging boiler system. Wear and tear on components may cause maintenance staff overriding controls systems to provide continuous heating in winter.
2. Multifamily buildings and systems are engineered with safety factors. When a wasteful malfunction takes place, waste rate can be higher than the normal usage rate.

3. Consumption (kWh) is a function of time. A “small” waste running extended hours will always add up to considerable waste.

Big Risks from Small Instances

As with most blind spots, they hide in plain sight. We need to re-train ourselves to see them. Here is an example to illustrate. Imagine two sized tanks. Both are always full of water. One of your tanks is larger, while the other is smaller (see Figure 1).

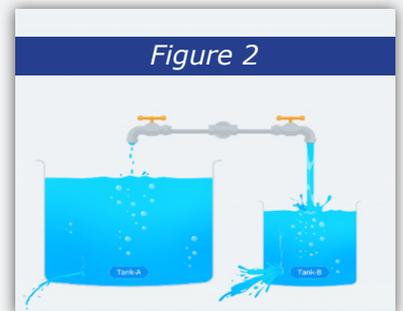
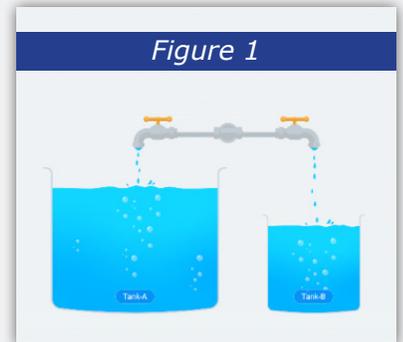
Knowing a fact about tanks that, on average, 30% of tanks leak and wastewater—which of the two tanks will you spend your time monitoring?

The common practice is to monitor the larger tank, because, the thinking goes, since it is larger, it will leak more. But this is a false assumption. We don’t know *which* tank will leak more. Maybe the larger tank never leaks or, if it leaks, it could be at a rate much lower than the smaller tank (as in Figure 2).

This is because, usually **the size of the system is only one factor amongst many others that determine the size of the risk.**

The same concept applies to energy consumption in buildings. Energy waste can occur in any area of the building and can be generated from smaller systems—and it is **not limited** to the nominal capacity/size of the system. Meaning, just because the system is small doesn’t mean it cannot be a large waste risk.

Consider another example: a malfunctioning Variable Frequency Drive (VFD). VFD is a type of motor controller that drives an electric motor by varying the frequency and voltage supplied to the electric motor. A VFD on a 30% oversized motor can more than double the consumption, and waste 137% of its normal consumption. Meaning, if such motor normally consumes \$100, a failed VFD can waste \$137 on top of the normal \$100. Another example of small consumption adding up to considerable waste would be a space heater under a cubical that is run for an extended period.



The Blind Spot

Now that we know waste can occur in considerable amounts in almost any electrically powered system in the building, detection of such waste requires monitoring of *every possible cause* of waste. But using data generated by the control/automation systems (associated with mostly larger systems) as a waste monitoring strategy leaves a large area of the building unmonitored. Smaller systems, like the VFD, space heaters, or myriad others show us this.

The **blind spot** in energy efficiency comes when we try to manage waste as we manage the normal consumption, that is using controls. We must think differently and use a different approach to capture energy waste. One way to eliminate this blind spot is by monitoring general areas, and not systems.

Key Takeaways

- Waste isn’t limited to systems under automation/controls; waste can occur outside of controls coverage.
- Automation itself can be a cause for waste. Thus, waste mitigation strategy must be built outside and independent of the building’s controls.

- Waste isn't only correlated to the kW power of the system, it depends also on its fail-to defaults, runtime, applied safety factors, and other factors.
- Controlling the large systems that normally consume large amounts of energy is encouraged and usually necessary.
- Managing energy waste is a different area of energy efficiency than managing the normal consumption of systems. It requires a different approach and way of thinking.
- To accurately detect energy waste, you must have the kWh, Amps, etc., of the main feed(s) and sub-meters. Detecting waste through controls data, status and command is not reliable, and neither it is a substitute for understanding your building's consumption behavior and trends.
- If detecting waste through controls data analytics has been a success for your housing portfolio, there is a high chance (statistically speaking) that you have a large opportunity you haven't tapped into yet (within the blind spot).
- For waste mitigation purposes, if you can't monitor every possible energy point/system, monitor areas instead.

Recognition and contribution for the article goes to Sal Alhelo, an energy programs manager for JCPenney. He manages a wide range of capital and operational programs focused on improving the company's energy efficiency. Sal focuses on creating and advancing simple, effective and sustainable programs that provide savings and long-term value. He holds an MBA with emphasis on Information Intelligence, a BSc in Mechanical Engineering and Energy Science. Sal is a licensed Professional Engineer and a LEED AP (BD+C). You can follow him on LinkedIn @sal-alhelo.

Changing Face of Utility Incentive Programs to Promote Greater Energy Efficiency

Utility incentive programs among utility companies are shifting to recognize emerging technologies, often working with their customers and vendors on projects to save energy.

At one time, incentive programs launched by utility companies often centered on rebates for purchases of energy-saving equipment. While these programs are still around, many utilities are shifting course.



"Now, the trend is to offer a financial incentive per unit of energy saved," says Howard Geller, executive director with Southwest Energy Efficiency Project (SWEET), a public-interest organization promoting greater energy efficiency and clean transportation in Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. It's 'pay for performance' versus paying for hardware. As part of this shift, many programs also strive to help energy consumers build a culture around energy efficiency.

The concept of pay-for-performance has been around for about 20 years. However, it now is "entering a new paradigm" says Giselle Procaccianti, commercial and industrial energy efficiency program manager with Northeast Energy Efficiency Partnerships, a non-profit accelerating energy efficiency in the Northeast and Mid-Atlantic states. Previously, it wasn't uncommon for utilities to estimate savings and offer incentives before any new equipment was even installed.

Now, some pay-for-performance programs require minimum energy savings targets, and some evidence the facility has met them. This is largely a result of advances in performance metering systems (the internet of things) that make it easier for energy users to monitor and adjust their usage in near real time. Another driver behind the changing incentive programs is that many educated consumers of the easy

wins, for example, replacing T12 lighting systems with more efficient T8 or LED systems — have occurred. In addition, advances in other technologies, such as energy storage systems, make a wider range of incentive programs feasible.

Changing the Organizational Culture

One of the most significant shifts among utility incentive programs is to a focus on promoting organizational cultures that incorporate continuous improvements in energy efficiency. For instance, some utilities offer incentives when organizations boost the efficiency of their equipment through better scheduling and fine-tuning the set points. Some work with organizations to help them set energy savings goals over multiple projects, extending over multiple years, and then track progress toward these goals. It's a commitment to continuous improvement versus just one-off projects.

Multifamily Energy Efficiency

SWEEP continuously studies and analyzes utility energy efficiency programs and incentives for the multifamily sector in Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. They turn that research into better-designed, stronger, and more effective multifamily energy efficiency programs and solutions by participating in utility dockets and planning groups about demand-side management (DSM).

SWEEP recommends a multifamily utility program that:

- Specifically targets the sector (rather than being lumped in with either residential or commercial).
- Goes beyond basic direct-install programs.
- Uses a one-stop-shop or a concierge-style model that connects the building owner or manager with a single point of contact who can help coordinate and streamline the process start to finish.
- Offers access to monthly whole-building energy data so owners can prioritize and track investments.
- Gives extra assistance to low-income sector through higher rebates, enhanced technical assistance, and customized outreach and marketing.
- Partners with cities, housing advocates, health advocates, trade associations, and contractor networks to expand the programs' reach.

SWEEP also works to strengthen, improve, and simplify energy codes that apply to multifamily new construction or major renovations. They encourage local jurisdictions to adopt the latest energy code and to improve the rate of compliance and enforcement. Another example of emerging utility incentive programs is the Energy Trust of Oregon. Energy Trust of Oregon works with five investor-owned utilities to deliver energy efficiency programs to 1.6 million residential, commercial, and other customers in Oregon. SWEEP's market solutions program is designed for construction of small-to-medium-sized buildings and helps building owners and managers select energy efficient equipment. The incentives they can earn increase as their energy savings increase.

The program offers varying packages of incentives. Facilities that achieve a 15 percent reduction in lighting power density and install code-required automatic lighting controls and advanced power strips at all workstations may earn up to \$.20 per square foot. Facilities that cut lighting power density and install automatic lighting controls and advanced power strips at workstations can earn up to \$.40 per square foot.

Utility incentive programs continue to evolve around technology, application and economics. Through strategic energy management programs, a growing number of utilities are supporting advanced technologies for energy management in residential, commercial and institutional buildings. The goal is to instill an energy-saving outlook, supported by both management and employees, and incorporated in planning and monitoring, until actions of turning off lights or computers or sourcing energy-efficient equipment become habit, embedded in our day-to-day activities at work and at home.

*Many thanks and credits go to the Karen Kroll, **ENERGY EFFICIENCY** and FacilitiesNet for their efforts in researching and presenting the latest information on energy efficiency and health impacts.*

Watts Hot at HUD

PIH Notice 2019-24

Provides updated guidance on the rate reduction incentive in Public Housing. The Notice was issued on September 3, 2019 and remains in effect until amended, superseded or rescinded.

HUD's notice serves as guidance to Public Housing Authorities (PHAs) on the use and eligibility of the Rate Reduction Incentive (RRI). This notice supersedes and replaces Notice PIH-2014-18 (HA) and supplements information in the Energy Performance Contracting (EPC), Utility Partnership Program (UPP), and the Operating Fund Grant processing notices.



The RRI is a financial incentive for PHAs that pursue special and significant efforts beyond what is required by statute and/or regulation to reduce their utility rate. The PHA's action must exceed the activities required by statute and/or regulation. Under HUD regulation 24 CFR § 990.185(b), a PHA will be eligible for a rate reduction if a PHA acts beyond normal public participation in rate-making proceedings, such as wellhead purchase of natural gas, administrative appeals, or legal action to reduce the rate it pays for utilities.

The RRI provides additional Operating Fund Grant formula eligibility to a PHA that undertakes a special and significant action to reduce its utility rate. PHAs with an eligible action will be eligible to retain one-half of the annual savings realized from their actions. A PHA must undertake an eligible action that results in the PHA paying a lower utility rate to be eligible for an RRI. The lower rate cannot result from factors that do not require the PHA to take an action and/or are beyond a PHA's control including, but not limited to, market changes, legislative changes, rate changes for all customers, or consuming energy at a different time of day. A coincidental change in the effective rate paid by the PHA from one year to the next is not always a result of a PHA action and therefore is not eligible for an RRI.

The RRI is not an incentive for complying with required procurement practices, conducting maintenance, and/or reducing utility consumption. The RRI is a tool to incentivize PHAs to lower the overall utility costs of the public housing program. Pursuant to 24 CFR § 990.185, the RRI evenly divides the financial benefit of the lower utility rate between the PHA and HUD (i.e., 50 percent to the PHA and 50 percent to HUD). RRI financial benefits, which are provided through the Public Housing Operating Fund Grant, may be used for any eligible Operating Fund Grant activity allowable under Section 9(e) of the United States Housing Act of 1937.

For additional information or questions regarding this notice, please direct inquiries to the Public Housing Management and Occupancy Division's energy policy mailbox at: PIH_EPC_Policy@hud.gov.

HUD Publishes NSPIRE Demonstration Notice and Some Standards

On August 21, HUD published a notice seeking comments on its National Standards for the Physical Inspection of Real Estate (NSPIRE) demonstration, intended to replace the REAC inspection model with updated standards and inspection procedures. With NSPIRE, HUD expects to obtain more accurate inspection results by streamlining the inspection process while placing a greater emphasis on unit health and safety conditions. The demonstration will last two years, is voluntary and will be open to participants from all regions, although properties in Region III (PA, VA, WV, MD, DE, DC) will receive preference in the initial cohort, with others added on a regional, rolling basis, up to 4,500 total participants. Comments are due October 21, 2019.

On August 20, HUD also released the first set of NSPIRE standards for review and comment, and welcomes input about the clarity of the definitions, the accuracy of the rationales, and the overall usability of the standards.

Transitions at HUD

It was announced on September 16, 2019 that Deputy Assistant Secretary DJ LaVoy has been asked by Secretary Perdue to serve as the Deputy Under Secretary of Rural Development at the Department of Agriculture. He started at USDA on Monday, September 16.

DJ has a long and distinguished career in public service. He is a retired Marine Officer, Naval Aviator and combat veteran. His military service included piloting Marine One for President Ronald Reagan. After his military service, DJ started at HUD and established the HUD Real Estate Assessment Center (REAC) in 1998. In 2002, he joined the Office of Field Operations (OFO) where he was instrumental in recovering and transitioning the Detroit Housing Commission and Miami-Dade County Housing Authority to stable affordable housing providers.

He has served as the DAS for REAC since 2013 where he has championed modernizing REAC's IT systems with internal resources and expertise, and most recently modernizing PIH's inspection protocols through the NSPIRE initiative.

PIH has been fortunate enough to have had DJ's talent and commitment for over 20 years, leading innovative reforms that have and will improve service for our partners, PHAs, and residents for decades to come.

David Vargas was announced as Acting Deputy Assistant Secretary of the Real Estate Assessment Center (REAC). He will be joining HUD from the General Services Administration (GSA). He has also served at OPM in multiple positions as Associate Chief Information Officer, Acting Deputy CIO, Acting CIO and Director of HR Information Technology Transformation where he led OPM's initiative to develop a strategic approach for using information technology to support human capital initiatives in the Federal government.

David is no stranger to HUD. Before his tenure at GSA, he was the Deputy Assistant Secretary of REAC. His 22-year career at HUD has included leadership positions with responsibility for policy development, strategic planning, budgeting and financial management, the day-to-day operations of the Housing Choice Voucher and HUD's disaster response to hurricane's Katrina, Rita, Ike, and Gustav. Fair winds and following seas to DJ. Best of luck to David Vargas.

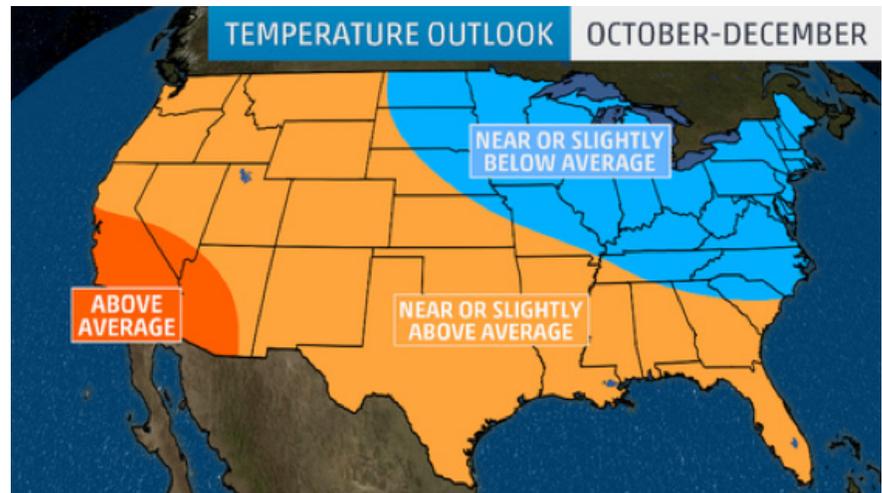
Weather Forecast Fall 2019/Winter 2020

Fall and Early Winter Likely to be Mild in the West and South, Cooler in the Northeast

Data courtesy of Department of Energy, Energy Information Agency

Relatively mild temperatures are likely for much of the country through the end of the year, however, cooler than average temperatures are possible in Northeast and Midwest.

The certainty in this forecast is lower than usual due to factors like the remnant El Niño and increasing water temperatures in the North Pacific, which would favor cooler weather, and climate models that continue to signal a warmer than average winter for much of the United States. Here's a closer look at how the forecast evolves the next three months.



Oil

- EIA forecasts Brent spot prices will average \$60/b in the fourth quarter of 2019 and \$62/b in 2020. EIA forecasts that West Texas Intermediate (WTI) prices will average \$5.50/b less than Brent prices in 2020.
- EIA expects that global liquid fuels demand will increase by 1.4 million b/d in 2020 as a result of an expected increase in global GDP growth.
- EIA forecasts U.S. crude oil production will average 12.2 million b/d in 2019, up by 1.2 million from the 2018 level. Forecast crude oil production then rises by 1.0 million b/d in 2020 to an annual average of 13.2 million b/d. The slowing rate of crude oil production growth reflects relatively flat crude oil price levels and slowing growth in well-level productivity.

Natural Gas

- The Henry Hub natural gas spot price averaged \$2.22 per million British thermal units (MMBtu) in August, down 15 cents/MMBtu from July. This summer, prices have declined amid rising natural gas production, despite high levels of both natural gas exports and consumption in the electricity generation sector. Based on recent price movements and EIA's assessment that natural gas production will be sufficient to meet expected demand and export levels at a lower price than previously forecasted, EIA lowered its Henry Hub spot price forecast for 2020 to an average of \$2.55/MMBtu, 20 cents/MMBtu lower than the August forecast.
- EIA expects monthly average natural gas production to grow in late 2019 and then decline slightly during the first quarter of 2020 as the lagged effect of low prices in the second half of 2019 reduces natural gas-directed drilling. However, EIA forecasts that growth will resume in the second quarter of 2020, and natural gas production in 2020 will average 93.2 Bcf/d.

Electricity, coal, renewables, and emissions

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants will rise from 34% in 2018 to 37% in 2019 and 38% in 2020. EIA forecasts that the share of U.S. generation from coal will average 25% in 2019 and 22% in 2020, down from 28% in 2018. EIA's forecast nuclear share of U.S. generation remains at about 20% in 2019 and in 2020. Hydropower averages a 7% share of total U.S. generation in the forecast for 2019 and 2020, similar to 2018. EIA forecasts generally lower wholesale electricity prices in 2019 compared with 2018. The lower forecast prices reflect lower natural gas fuel costs. The first half of 2019, the average U.S. cost of natural gas delivered to power generators was 9% lower than the same period in 2018. EIA expects the delivered cost of natural gas during the second half of 2019 to be 31% lower than last year. Forecast electricity prices in the southeast are less than 1% lower than 2018, while prices in New England are 28% lower.

Coal

- EIA forecasts that U.S. coal consumption will total 593 MMst in 2019 and 548 MMst in 2020, a decline of 14% in 2019 and 8% in 2020.

Renewables

- EIA forecasts that utility-scale renewable fuels, including wind, solar, and hydropower, will collectively produce 18% of U.S. electricity in 2019 and 19% in 2020. EIA expects that annual generation from wind will surpass hydropower generation for the first time in 2019 to become the leading source of renewable electricity generation and that it will maintain that position in 2020.
- EIA expects electric power sector generation from renewables other than hydropower—principally wind and solar—to grow from 409 billion kilowatthours (kWh) in 2019 to 467 billion kWh in 2020. In EIA's forecast, Texas accounts for 19% of the U.S. nonhydro renewables generation in 2019 and 21% in 2020. California has a share of 15% in 2019 and 14% in 2020. Regionally, the Midwest and Central power regions each have shares in the 16% to 17% range of the U.S. generation total from renewables other than hydropower.

Emissions

- EIA forecasts that, after rising by 2.7% in 2018, U.S. energy-related carbon dioxide (CO₂) emissions will decline by 2.5% in 2019 and by 1.0% in 2020. In 2019, EIA forecasts that space cooling demand (as measured in cooling degree days) will be lower than in 2018, when it was 13% higher than the previous 10-year (2008–17) average. EIA expects U.S. CO₂ emissions in 2019 to decline because the forecast share of electricity generated from natural gas and renewables is increasing while the forecast share generated from coal, which is a more carbon-intensive energy source, is decreasing.

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