

Journal of

Utility

m a n a g e m e n t

THE LATEST RESEARCH AND MODELS ON
OPTIMIZING UTILITY USAGE IN MULTIFAMILY
VOL. 2, ISSUE 1 • SUMMER 2012

**MULTI
FAMILY**

Looking into each other's houses

PAGE 8



SUPPLEMENT TO

MULTIHOUSING

PRO

magazine

Utility Management *Advisory*

Power in numbers

Whether it's saving on your community's utility costs, or an alliance of like-minded multifamily professionals, there is power in numbers.

You can't make good business decisions without good data, the kind that comes from industry-wide connection and knowledge. UMA is a network of leading experts, owners, and operators in the multifamily industry. It's a connection that assures that owners and operators can stay nimble in fast-moving utility environments and the multifamily markets they so directly impact.

Stay informed. Register today.

A national think-tank for utility management professionals in the apartment industry

www.UMAdvisory.org



THEY JUST SCORED **HUGE** ENERGY SAVINGS. WANT THEIR RÉSUMÉS?

NAME: Carolina Watt-Busters, Morrison Residence Hall, UNC Chapel Hill

WINNERS OF: EPA's first-ever National Building Competition

SAVINGS: 36% reduction in energy use | \$250K in one year



These students and the UNC Energy Management team helped their dormitory cut more than 730 metric tons of carbon emissions, scored \$250,000 in savings, and earned ENERGY STAR® certification for their building. From dorms to apartments energy management offers great returns. Start saving today at energystar.gov.



ENERGY STAR



TABLE OF CONTENTS

9 COVER

Looking into each other's houses

We perpetually wonder who bought what, the price per square foot, and, of course, what was the CAP rate on that deal? We love to compare ourselves against each other. So, why don't we do this with our utilities?

6 Change is inevitable

Houston's Proposition 1 is the first of its kind. It may also be the first of many as cities and towns struggle to pay for infrastructure improvements. The new proposition changes everything, especially for multifamily.

7 The 10 cities with the highest power bills

The average utility cost is \$267.61 a month. Where do residents pay the most for utilities? And the winner is...

10 Managing utility spend

12 NMHC and NAA huddle on green advocacy

12 Energy chief Chu calls for tax credit extension

14 Largest array in Georgia shines light on solar

15 How U.S. utilities can avoid a risky \$2 trillion bet

Journal of
Utility
management





Circle the wagons

No other industry stands more toe-to-toe with the issue of energy than those of us in multifamily. Every bill. Every tax. Every regulation put forward by our various governing bodies impacts multifamily owners and operators at a greater velocity than any other group in the country.

Now what?

What is our next move? And it better be right because, my friends, so very much hangs in the balance: The cost of doing business. Our ability to compete in the marketplace. The ability to maintain profitability while adapting to a rising tide of regulation and pervasive energy standards.

We stand at the threshold of significant change and the risks have never been greater.

It is critical that we circle the wagons as an industry, and through organizations such as NAA, NMHC and the Utility Management Advisory, we become a beacon of knowledge for our businesses, and multifamily leaders for our residents.

We can't do this alone.

If you do but one thing this month to hedge against the incoming changes affecting utilities, join the Utility Management Advisory.

Built from apartment owners and operators, large and small, who saw this coming long ago, the group is not only boots-on-the-ground, tactical intel, but the brain trust of all things energy and multifamily.

If we didn't see you at the March Summit in Huntington Beach, please make a point of attending the next meeting. There is power in numbers and it's vital that the whole of multifamily be present at the table when gauging the vast frontier ahead.

Join me in the adventure, won't you?

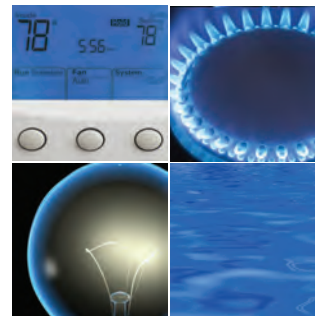


Michael Radice
mike@UMAdvisory.org

Utility
Management
Advisory

OUR MISSION

The **Utility Management Advisory** is a forum to leverage multifamily owners' real-world experiences and perspectives into information that will drive education to policy makers and property owners, and dispense tangible, actionable recommendations. This alliance will improve multifamily owners' and managers' ability to: conserve, save money, serve residents, while protecting and enhancing their fiscal bottom lines and property values, and staying ahead of emerging policies and requirements.



Journal of Utility management

www.utilitysmartpro.com

535 Anton Boulevard, Suite 1100
Costa Mesa, CA 92626
Ph: 949.253.2592

PUBLISHER Utility Management Advisory

UMA DIRECTORS Mary Nitschke, president
Sr Ancillary Services Manager
Prometheus RE Group

Mark Copeland, COO
WestCorp Management

Tom Spangler
Multifamily Utility Consultant

Tim Haddon
Director, Ancillary Services
Associated Estates Realty Corp.

Kent McDonald
VP, Ancillary Services
AIMCO Apartment Homes

EDITORS Michael Radice
mike@UMAdvisory.org

Jim Charles
jim@UMAdvisory.org

BUSINESS EDITOR Tim Rogers
tim@UMAdvisory.org

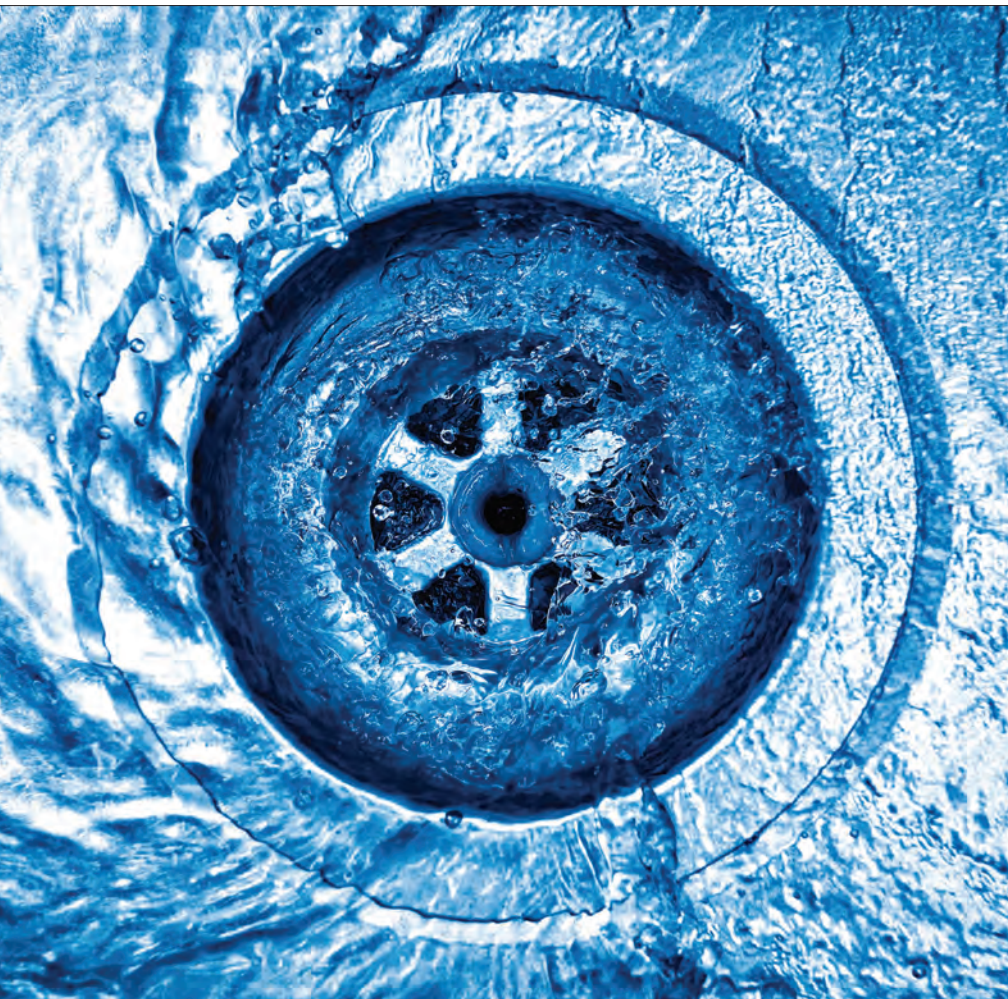
PRODUCTION Image Advertising, Inc.

SUBSCRIPTIONS
Subscribe at www.UMAdvisory.org

REPRINTS
To request content licensing, email:
reprints@UMAdvisory.org

CHANGE OF ADDRESS
Write: Circulation Desk
4115 Blackhawk Plaza Circle, Suite 100
Danville, CA 94506

©2012 UTILITY MANAGEMENT ADVISORY
ALL RIGHTS RESERVED • Printed in USA



Change is inevitable

For Houston property owners and residents, change—at least in the area of waste water—has occurred. Charter Amendment Proposition 1 passed in November, 2010, approved a dedicated funding source to enhance, improve and renew drainage systems and streets in Houston. It became

effective and began to appear on residents' water bills July 2011. The proposition creates revenue for the City of Houston, but alternatively, creates a new and hidden tax on property owners and residents.

The proposition created a dedicated “pay-as-you-go” fund to improve city streets and

drainage facilities. It now impacts fees on developers and drainage fees, has resulted in an increase on the City's property tax and has also created charges on proceeds from Metro, TxDot, federal and other contracts or grants to improve the City's infrastructure for streets and drainage.

Prior to this proposition, water drainage was based upon the size of the meter with a monthly, flat service fee. Now it is based on the linear square footage of the perimeter of the property.

Supporters of the proposition initially estimated an average \$5 per month increase per homeowner's water bill. However, on June 7—just days before the first bills were issued—the mayor revised the estimate to \$8.25 per month (a 65 percent increase).

Proposition 1 has definitely had an impact on multifamily. Where a management company re-bills wastewater charges back to the residents, the estimated increase per unit (based on a unit count of 400) has been \$12.50 per unit; a 130 percent increase from the original quote of \$5 per household.

Houston's Proposition 1 is one example of how municipalities are finding ways to cover increasing costs in wastewater.

Change has a tendency to spread and we expect similar changes in other state, county and city municipalities throughout the country. ⚙



Author: On any given day, Mark Copeland oversees day-to-day operations of over 20,000 WestCorp Management units in eight states. Having previously served as EVP and COO of a property management firm where he was responsible for 66,000 units, he excels at large scale. With his unique background in renovation, construction and capital improvement, Copeland monitors daily activities with an eye on the future.



Proposition 1

To recover the city's cost of service to provide drainage to benefitted properties, there is hereby imposed annual drainage charges calculated as provided herein on all parcels of real property within the drainage service area for which drainage service is made available under this article, save and except

for those properties exempted from the payment of drainage charges as provided herein.

The rate applicable to each square foot of impervious surface of a benefitted property shall be determined on the basis of whether the land use of the benefitted property is classified as residential or non-residential. In addition, the rate applicable to a residential property shall be determined on the basis of whether the drainage system for the property is curb and gutter or open ditch.

All drainage charges shall be calculated by applying the appropriate rate per square foot of impervious surface as specified in the Schedule of Rates attached hereto, multi-

plied by the area in square feet of impervious surface on each benefitted property.

The area of impervious surface on each benefitted property shall be determined on the basis of digital map data associated with tax plats and assessment rolls or other similar reliable data as shall be determined by the director.

In the event of a residential property is served by curb and gutter drainage on one or more sides and by open ditch drainage on one or more sides, the appropriate rate shall be determined by the street address for the property and the drainage system that corresponds to that side of the property.

The 10 cities with the highest utility bills

SOURCE: WWW.WHITEFENCEINDEX.COM. Utility bill amount refers to electricity, gas



1. New York The average utility bill is \$342.60 per month.



2. Washington DC The average utility bill is \$310.34 per month.



3. Boston The average utility bill is \$304.29 per month.



4. Portland Average monthly utility bill: \$289.95



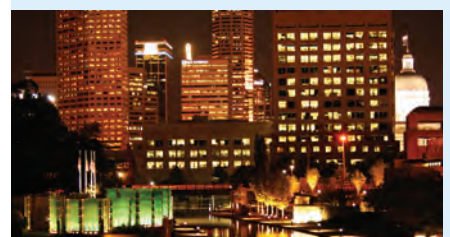
5. Orlando Average monthly utility bill: \$283.93



6. Houston The average utility bill is \$283.91 per month.



7. Seattle The average utility bill is \$280.91 per month.



8. Indianapolis: The average utility bill is \$280.60 per month.



9. Las Vegas \$280.22 per month
10. Minneapolis \$279.82 per month





Looking into each other's houses

As property managers, we spend a lot of time getting to know what everyone else is doing. We like to compare.

We are obsessed with knowing what other properties in the same market are charging for rent. We even call each other pretending to be prospective residents. We make significant investments in technology to ensure that our property has the top rent in the market, giving us more flexibility to charge what we want.

Our acquisitions teams scour markets for the best deals, and are always reaching out to see who bought what, the price per square foot, and, of course, what was the CAP rate on that deal?

Even in human resources we inquire and compare. We strive to ensure that salaries are competitive and in line with everyone else. We hire consultants, and slice and dice reports and data in order to make well-informed decisions.

Ultimately, it comes down to this: We all want to drive the market. We love to compare ourselves against each other. So, why aren't we doing this with our utilities?

In commercial real estate for office space, savvy renters negotiate not just the rent they feel is appropriate for the given market and amenities, but they negotiate utilities. This might be based on the CAM charges, or they may insist on a gross lease (one that includes utilities).

Are we so naïve that we think this isn't coming in multifamily? Do we really believe that if our residents are paying twice as much for utilities versus the costs at a community near us, that we aren't at risk of los-

ing that resident? Do we know that offering "one month free rent" just won't work with a prospective resident who understands that a lower utility bill is worth more than that free month?

Get ready for the shift

Be prepared to lease apartments based on energy efficiency, not just granite counter tops and premium views. As our municipalities adopt mandatory participation for multifamily in EnergyStar benchmarking, like Seattle and others, we must be ready.

There are challenges with benchmarking a multifamily building; the EnergyStar system not only considers the building's expense (our house expense, or common area) but the metered utilities within the units. Some of my peers may feel that comparing utility expense is useless citing that "we cannot control how our residents use their utilities." We can't?

I think, to a huge degree, we can. Who installed the toilet, and how often has the flapper been replaced? Do we include aerators in the faucets? Do we provide low flow showerheads? How energy efficient are the windows? What type of ballast is in the kitchen? Magnetic? Are you still using T12? How old is the dishwasher? How many kilowatts per year does the refrigerator use?

All these components are major contributing factors toward the overall utility consumption of a unit. A wall heater won't be as effective in a unit with poor insula-

tion. How effective is your hot water recirculation pump? Does your roof have a radiant barrier?

Considering that the major contributors to energy use and the resulting cost; namely the appliances and building envelope, are ours, how can we not be responsible?

Yet, for decades, since residents have had to put metered expense into their name, the multifamily industry has not focused on how energy is used in the units. Mandatory evaluation and scoring of expense, such as Seattle, will change that.

Benchmarking a multifamily building on the EnergyStar platform takes effort. Collaboration of multiple parties is required. Many of our RUBs (Ratio Utility Billing) providers are partnering with EnergyStar to develop a process that automates the upload of the utility consumption information into the EnergyStar benchmarking system. Property owners and managers must vet and confirm all meters (unit and house accounts) to confirm that the information is complete and accurate.

For cities, such as Seattle, with mandatory participation, collaboration with the utility providers (electric and gas) that service the units are integrated into the process to provide the consumption information for the occupied units. With the volume of effort that must be completed to set up a property on EnergyStar, it is no wonder that the deadline to comply with the City of Seattle's ordinance was extended from April 1, 2012 to October 1, 2012.

In the movie, *The Mummy*, High Priest Imhotep repeats, "Death is only the beginning." For multifamily, we could easily modify that to "Benchmarking is only the beginning." We may resist it, resent it, think that what happens in Seattle will stay in Seattle, but ultimately once our properties are on EnergyStar, and the system goes live, the comparison will begin. The competition will begin. The investments will begin.

It will be game on. We will, finally, get a whole new realm to compare ourselves in. And we do love that, don't we? ⚙️



Author Mary Nitschke is passionate about utilities, and should, perhaps, switch to decaf. She is the first president of the Utility Management Advisory Board, holds an Energy Resource Management

Certificate from UC Davis, two BAs from UC Berkeley and is Sr. Ancillary Services Manager for Prometheus Real Estate Group, Inc. Nitschke has the first law of thermodynamics posted by her office door, and a 1970 Lincoln Mark III, with over 400 bhp, in her driveway.

Managing utility spend



Owners and managers are eager to find ways to save money on energy costs. But low hanging fruit can be elusive.

Negotiating energy contracts is a good start, but requires specific knowledge and expertise. And most owners and managers cannot afford the luxury of a complete energy staff on payroll to watch volatile energy markets.

In an effort to do more with less, those responsible for negotiating energy contracts, and securing appropriate rates and cost structures, also handle other, non-energy related issues. To make the best energy decisions, many owners and managers have turned to an energy broker. But what do you consider before signing a contract?

Decide what functions the broker will provide and your anticipated level of involvement. Some customers prefer to be hands on, staying involved in every step of the process, while others leave the energy decisions to the broker. A good broker will have a solid track record of delivering savings to their customers over an extended period of time.

References and reviews of past performance on other projects with which the broker was involved are a good place to start. A solid broker will have experience in every deregulated state in which he/she will be working, both gas and electric.

Few states require energy brokers to be licensed. The best brokers have past work history with energy companies, or have traded energy in the past. Brokers with such experience understand the inherent risk of energy supply pricing and contracts.

Up-to-the-minute knowledge of the electric and natural gas prices, and ensuing market conditions, can be pivotal in good purchasing decisions.

Some brokers only shop the market at certain times of the year while buying in aggregate. Other brokers only shop an energy contract when it expires.

Natural gas and electricity, like all other commodities fluctuate in price on a day-to-day basis.

A prudent question might be: why are we shopping in October versus November? A broker who makes bulk purchases two or three times a year is not considered an active energy buyer by utility providers, and may not get the best deal.

What is the broker's approach to negotiation? An effective broker will always act in your best interest, with obvious regard to

efficient purchasing, long- and short-range.

Unfortunately, some brokers may sign up customers on pricing plans that add more benefit to the broker's bottom line with little regard for the customer. And logically, those who are paid by only a select group of suppliers (i.e. preferred relationships), or paid different rates by suppliers, will inherently favor the supplier's best interests over the owner. Any compensation should be clearly stated and disclosed up front.

One example is when the broker chooses to lock in long-term purchase. While ensuring steady cash flow for the broker, it may not be to the fiscal advantage to the owner, in the long run.

Keep the process seamless

One key way to keep the process efficient is to provide the broker access to your billing data. This lessens the burden of digging up account data and rate schedules, and assures the information is most accurate.

Ensuring complete and accurate data is a big part of the broker's job. A broker is as only good as his/her data. When establishing a relationship with a broker, having an integrated solution with your other utility management services leads to quicker and more effective decisions. Most pricing received from suppliers is on a deadline so delaying the processes with manual operations can be the difference between thousands of dollars in savings or added costs.

Finally, a good energy broker will understand more than bidding and buying energy. Understanding the underlying cost structure, including tax-exempt opportunities, base fees and usage guarantees can mean thousands of dollars to your energy costs that aren't seen in the pure tariff rate. Understanding, negotiating and ensuring compliance with these terms in any contract is a critical component of an effective energy broker and partner.

When building a utility budget, or any budget, consider why you're dedicating your valuable time to the effort. Whether it's just part of your job, or you're in it to win it, these are but a few strategies that can simplify your utility budgeting process and create wins for your operation. ⚙️

Author Darren Novich reduces energy costs for some of the largest multifamily companies in the



country. His knowledge and experience as an energy trader gives him the advantage against any therm or Kwh. Novich is managing partner for EnergyLink, and has also worked with several energy suppliers.

Electric cars and apartments

With many of the initial sales of electric cars going to people who can charge them in their home garages, electric-car makers are starting to think about how to tap the market for condo and apartment dwellers.

In the environmentally-conscious, affluent enclave of Santa Monica, Calif., 70 percent of the residents live in multifamily housing, says Ed Kjaer, Southern California Edison's electric-car expert. The utility serves 10 million customers.

When it comes to electric car adoption, some interesting patterns are emerging: an overwhelming number of customers—93 percent—are opting for charging plans that give them a price break when they plug in at off-peak hours, Kjaer says. More customers are also calling the utility to ask about rates. ⚙️

Excerpt Chris Woodyard, *USA Today*

Austin Energy incentivizes apartments that go green

Austin Energy will offer low-interest loans and rebates to apartment communities for energy-efficiency improvements to help them comply with the city's Energy Conservation ordinance.

The new incentives, effective in June, will be performance-based such that the amount of each rebate will be based on the amount of energy saved.

The energy utility is working with 51 apartment communities with higher than average energy usage to reduce energy consumption and save residents money.

The new ordinance requires apartment communities 10 years old or older to audit their energy use, and, in the case of high energy consumers, share the information with current and prospective residents.

Austin is the only city in the country to require properties to disclose the expected average electric bill to prospects.

Under the law, apartment properties that exceed the average energy use for apartments of similar size are required to reduce energy use by 20 percent. ⚙️

Excerpt Vicky Garza, *Austin Business Journal*



Energy chief Chu calls for tax credit extension

U.S. Energy Secretary Steven Chu, in Denver for the World Renewable Energy Forum, called on Congress to extend tax credits that bolster the nation's alternative energy industry.

"America can't afford to miss out on the clean energy opportunity," Chu said in prepared remarks at the forum in May.

President Barack Obama is pressing Congress to extend the Production Tax Credit, which saves wind farms \$22 for every megawatt generated during the farm's first 10 years of existence and is set to expire at the end of the year.

Obama also wants to expand a 30 percent tax credit for investments in clean energy manufacturing known as the 48C Advanced Energy Manufacturing Tax Credit.

Those credits, Chu said, "are supporting companies and workers here in Colorado and across the country."

Vestas Wind Systems, which employs some 1,600 workers at its wind-turbine plants in Colorado, has said it may lay off at least some of its employees based on whether it expects Congress will renew the Production Tax Credit.

While credits and incentives are propping up the alternative-energy industry now, Chu said the industry is getting closer to the point where it will be cost-competitive with traditional forms of energy.

"The market is getting bigger, the technology is getting better, and costs are coming down. The question is no longer if clean energy will become competitive with conventional forms of energy; the question is, 'When will it happen?'" ☀

Excerpt Denver Business Journal



Nobel Laureate and U.S. Secretary of Energy Steven Chu says the U.S. must act quickly to take advantage of renewable energy's potential. The Obama administration has made renewables a central focus of its energy platform, calling for major investments in wind and solar power.

NMHC and NAA huddle on green advocacy

As apartment owners and operators, it's hard not to notice the regulatory environment changing with regard to sustainability and energy management. Knowing where to find good information on these changes, as well as those who hold the apartment industry's best interest as a priority, is critical to staying aligned with on-going changes.

The National Multi Housing Council (NMHC), and the National Apartment Association (NAA) are gearing up to proactively advocate on such legislative and regulatory matters.

According to Eileen Lee, NMHC VP of Energy and Environmental Policy, the NMHC is in the early stages of assembling a sustainability subcommittee, but has already selected leaders for the effort.

Louis Schotsky, of EQR, is chairman of the NMHC subcommittee, and Martin Sprang of AIMCO is vice chairman. The membership roster is building, but the subcommittee will soon meet to develop a formal mission statement and goals.

NMHC has created a green practices portal to promote industry best practices for energy conservation and sustainable development. The hope is that this online resource will provide valuable input to help policymakers craft effective and achievable energy efficiency goals. Find information about the NMHC's sustainability efforts and upcoming meetings at www.nmhc.org.

NAA has also launched a green website and resource center. In line with their mission to promote professionalism and provide educational tools for the industry, the NAA seeks to take a leadership role in the green effort. They seek to prepare members and

local affiliates for the widespread acceptance of sustainable buildings, and create green education programs to promote cost-effective, energy-efficient practices.

As part of the NAA's effort to promote awareness, they have formed the NAA Green Task Force. Led by NAA Board member Scott Wilkerson of Gingko Residential, the task force held their latest meeting at the NAA Capitol Conference in Washington, DC in March, 2012.

The group is planning a green conference for April, 2013.

The task force will focus on the economics of going green. They seek to collect case studies of real-world green programs that are both successful, and profitable.

Wilkerson sees a pent-up demand from residents to lower their cost of ownership. "Because their utility bills will be lower their apartment will be more comfortable, and their indoor air quality will be better. I think our residents will stay longer."

More about the NAA Green Task Force, and the NAA's latest initiatives in green education, regulatory affairs, and resources for sustainable community operations is available at www.naaq.org/green. ☀

Author Tom Spangler works with multifamily companies to better manage their ancillary income and utility reimbursement programs. He helps manage their utility expenses, including energy conservation programs, commodity purchasing and utility payment processing. Spangler was with UDR, Inc. for twelve years, the last of his tenure as SVP of Business Development, and Chief Risk Officer. Spangler holds a BS in chemical engineering from Virginia Tech and MBA from the University of Virginia. He currently works with Greystar.



Regulations **matter**

your attorney says so

R E G



ExpertSM

Are you billing your community legally? Are you maximizing what you can bill? It matters.

NWP's compliance team is the industry's go-to on national, regional and local regulations as related to the apartment utility billing.

With NWP's industry-leading experience and our deep knowledge of the regulatory environment we can show you how to take full advantage of what is permissible.

Utilities typically run about 15% of a property's operating cost, so transferring the cost of water, sewer, trash, gas and other utilities to the residents who use them only makes sense for today's apartment operator looking to boost their bottom line.

The challenge is the mass of regulations and legal requirements related to utility billing.

Don't guess. NWP's Reg Expert provides ongoing peace of mind on your property's regulatory compliance because regulatory compliance is not a one-time event.



Smart Solutions:
Lower Operating and Utility Costs

888.695.6389
www.nwpssc.com



Largest array in Georgia shines light on solar

Row after row of solar panels sat soaking up the sun on the roof of the senior residence at Sustainable Fellwood.

At 85 kilowatts, the system is among the largest residential systems in Georgia. It powers the common areas of the residence and the street lights around the building.

"It's generating twice as much as we use," said Curry Wadsworth, president of Parallel Housing, one of the developers of Sustainable Fellwood.

That's about \$1,500 worth of electricity a month the panels have been generating since they began operating in December.

The second and third phases of the mixed-use, mixed-income Sustainable Fellwood were dedicated in May.

The \$500,000 solar panels came relatively late in the project, made more affordable by a \$450,000 stimulus grant. Even without the grant and tax credit, though Wadsworth said the solar array made sense.

"In the life of the building it will certainly

ly pay for itself a couple of times," he said.

Along with the solar array, more than 50 apartments and the community center in phase II of the project were built to be solar-ready with conduits placed inside the walls during construction. If solar panels are added to those buildings it will be a snap to connect the apartments to that supply, said Jack Star, a local solar advocate who pushed for the wiring through his group Solar Champions. And the idea is spreading.

"Because it was done here all Savannah Gardens is being built solar-ready as part of the specifications," Star said.

Sustainable Fellwood boasts walkability and bike friendliness, and an organic garden, as well as homes that are 30 percent more energy efficient than conventional ones. The first two phases have received prestigious gold LEED ratings. The third

Sustainable Fellwood is a 27-acre site located just west of Savannah's Historic District. Fellwood is an early entrant into the U.S. Green Building Council's LEED for Neighborhood Development pilot program. The design maximizes green surfaces and implements technologies to reduce stormwater runoff. Water usage will be minimized through native and xeriscape landscaping outside and low-flow fixtures inside. Energy costs will be reduced by maximizing natural day lighting with thermally-efficient windows and exterior, highly-reflective roofs, and EnergyStar appliances throughout.

phase is on track to go even higher with a platinum LEED rating, vaulted there in part by the solar panels.

Denise Grabowski, past president of the Savannah Chapter of the U.S. Green Building Conference, calls Sustainable Fellwood her favorite project. Green buildings like these are more economically sustainable, she said.

"The first cost of a building, what you'd call the sticker cost, is only 5 to 15 percent of the lifetime cost," she said. "This looks to offset the other 85 to 95 percent of the cost so you can truly appreciate the benefit of green building." ☀

Source: Mary Landers, savannahnow.com



How U.S. utilities can avoid a risky \$2 trillion bet

Risk comes in different forms, and there are times when business as usual becomes risk itself. America's electric utilities are approaching just such a moment.

Across the country, a generation of power plants and transmission systems is aging and needs to be replaced. At the same time, rules on pollution and greenhouse gas emissions are tightening. Clean energy technologies are getting cheaper and gaining market share. These shifts coincide with record spending: Utilities are expected to make \$2 trillion in capital investments over the next 20 years—about double their recent spending rate.

How to move forward in this complex, risky environment? That's the subject of a new report from Ceres, *Practicing Risk-Aware Electricity Regulation: What Every State Regulator Needs to Know*.

The industry experts who wrote the report analyzed a range of investment decisions utilities could make over the next two

decades—decisions that will determine which utilities prosper and how their shareholders, ratepayers, and the wider society will be affected. The economic as well as environmental stakes are high.

Just ask Progress Energy. In 2009, the utility began collecting money from its Florida customers to build a new nuclear power plant for 2016 at an expected cost of \$4-6 billion. The company's latest estimates: \$24 billion to build the plant for 2024. That's a huge bill to saddle customers with, especially given cheaper and less risky alternatives.

Avoiding such outcomes is exactly the subject of this report. Building big nuclear or fossil-fueled power plants is getting riskier and more expensive, and it's no longer the default. For regulators, playing by yesterday's rules won't work. That's why the report

calls for regulators to take a "risk-aware" approach to deciding what utility investments most benefit society while earning a fair return for utility shareholders.

Using comprehensive analysis, the report authors rank power sources by cost and risk. Nuclear power, for example, ranks roughly in the middle of the pack on cost (or at least it did before last year's disaster in Fukushima, Japan). But it is far and away the most exposed to risk, which is why new nuclear plants (such as the one Progress Energy is planning in Florida) can cost five times initial estimates. Beyond cost overruns and delays, the nuclear industry's ongoing waste disposal problem and the effect of accidents like Fukushima cannot be ignored.

The report also finds coal-fired power plants to be among the riskiest options, with natural gas-fired plants not far behind. And significant questions remain about carbon capture and storage (CCS) technology, which coal and gas-fired plants will require under a future carbon policy. The liability that attaches to long-term maintenance and storage of stored carbon could represent a serious material risk.

The good news is that there's a far less risky, less expensive option than nuclear or fossil-fueled power plants: energy efficiency. With increased efficiency, risks like construction delays, fuel price hikes and pollution control costs aren't an issue. The cheapest power plant is one a utility doesn't have to build.

But investment in energy efficiency will require regulatory adjustments. As long as utilities make money solely from the power they sell—and not by helping ratepayers use less energy—efficiency will be relegated to the sidelines.

Other low-risk and low-cost options identified in the report include renewable resources like wind, geothermal and biomass. In general, renewables come out ahead.

The report amounts to a strong call for state utility regulators to be more engaged and forward-looking in approving utility investments. Just like diversifying an investment portfolio, diversifying energy sources to include efficiency and renewables, fossil and non-fossil generation, and a mix of supply and demand-side strategies is key for utilities and those that depend on them.

For an industry facing sweeping new forces and major transformative change, the real risk lies in building the next generation's infrastructure using yesterday's technologies and business models. ☀

Source: Mindy Lubber, president of Ceres and director of Investor Network on Climate Risk

Building great real estate business **matters**

your bottom line says so



Unlock the full potential of your multifamily portfolio

Multifamily is a local business, unique to location, demographic and type. Optimizing profitability takes individual review and customized planning to deliver top performance.

SmartSource is a one-of-a-kind platform, customized to your specific community and built with one objective: deliver profitability.

SmartSource optimizes your multifamily operations within a single platform of products and services to generate NOI. By targeting and reducing the highest expenses on your multifamily property, SmartSource delivers the greatest impact and sustainable fiscal result.



Smart Solutions:
Lower Operating and Utility Costs

888.695.6389

www.nwpssc.com