

THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

Before Commissioners: Shari Feist Albrecht, Chair
Jay Scott Emler
Pat Apple

In the Matter of the Complaint Against Kansas)
City Power & Light Company by Keith S.) Docket No. 15-KCPE-474-COM
Carpenter.)

In the Matter of the Complaint Against) Docket No. 15- KCPE-265-COM
KCP&L by Denese Roberts.)

In the Matter of the Complaint Against Westar) Docket No. 15-WSEE-211-COM
Energy by Jami Reihm.)

In the Mater of the Complaint Against Westar) Docket No. 16-WSEE-066-COM
Energy by Steven N. and Mary Kay Ricke.)

ORDER ADOPTING STAFF'S MEMORANDUM

This matter comes before the State Corporation Commission of the State of Kansas (Commission). Having examined Litigation Staff's Memorandum submitted in this matter and being duly advised in the premises, the Commission finds as follows:

I. BACKGROUND

1. On August 7, 2015, Steven N. and Mark Kay Ricke (Complainants) filed a Formal Complaint against Westar Energy (Westar) with the Commission.¹

2. On August 13, 2015, the Complainants filed an Amended Formal Complaint,² attached hereto as "Attachment A" alleging that smart meters create a serious risk to health and safety due to EMF radiation and the potential for smart meters to start fires.³

¹ Complaint Against Westar Energy by Steven N. and Mary Kay Ricke, August 7, 2015 (Formal Complaint).

² Amended Formal Complaint Against Westar Energy by Steven N. and Mary Kay Ricke, August 13, 2015 (Amended Complaint).

³ Id.

3. On September 9, 2015, Litigation Staff for the Commission prepared a Memorandum analyzing the Amended Complaint for compliance with Commission regulations.⁴

4. Litigation Staff recommends the Commission find that the Complainant's health and safety argument substantially complies with the procedural requirements of K.A.R. 82-1-220 and establishes a *prima facie* case for Commission action.⁵ Staff notes that the Amended Complaint does not specifically cite to any violation of law, rule or order in support of its argument and is thus not in compliance with K.A.R. 82-1-220(b)(1).⁶ However, Staff recommends the Commission waive K.A.R. 82-1-200(b)(1) for good cause.⁷

II. FINDINGS AND CONCLUSIONS

5. The Commission is satisfied that jurisdiction to conduct the requested investigation exists pursuant to K.S.A. 66-101 *et seq.*⁸ Specifically, the Commission may investigate formal complaints regarding rates, rules, regulations, or practices of gas and electric public utilities. Furthermore, the Commission is granted authority over each electric public utility's equipment, manner of conduct, and management to protect public safety.⁹

6. The Commission finds that Litigation Staff's Memorandum dated September 9, 2015, attached hereto as Attachment "B" is hereby adopted and incorporated by reference.

IT IS, THEREFORE, BY THE COMMISSION ORDERED THAT:

⁴ Legal Staff's Memorandum, September 9, 2015.

⁵ *Id.*

⁶ *Id.* at pp. 2-3.

⁷ *Id.* at p. 3.

⁸ Specifically, the Commission is granted broad authority to review formal complaints. *See* K.S.A. 66-101e ("Upon a complaint in writing made against any electric public utility governed by this act that any of the rates or rules and regulations of such electric public utility are in any respect unreasonable, unfair, unjust, unjustly discriminatory or unduly preferential, or both, or that any regulations, practice or act whatsoever affecting or relating to any service performed or to be performed by such electric public utility for the public, is in any respect unreasonable, unfair, unjust, unreasonably inefficient or insufficient, unjustly discriminatory or unduly preferential, or that any service performed or to be performed by such electric public utility for the public is unreasonably inadequate, inefficient, unduly insufficient or cannot be obtained, the commission may proceed with or without notice, to make such investigation as it deems necessary").

⁹ K.S.A. 66-101h.

(A) The Amended Complaint substantially complies with the procedural requirements of K.A.R. 82-1-220.

(B) K.A.R. 82-1-220(b)(1) is waived for good cause.

(C) The Amended Complaint establishes a *prima facie*¹⁰ case for Commission action.

(D) The Amended Complaint is to be served upon Westar Energy.

(E) Staff shall investigate this matter and submit a Report and Recommendation to the Commission.

(F) This docket shall be consolidated with Docket Nos. 15-KCPE-265-COM, 15-WSEE-211-COM, and 15-KCPE-474-COM.

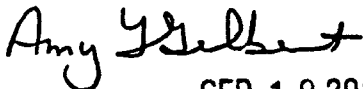
(G) The parties have fifteen (15) days, plus three (3) days if service of this order is by mail, from the date this order was served in which to petition the Commission for reconsideration of any issue or issues decided herein.¹¹

(H) The Commission retains jurisdiction over the subject matter and the parties for the purpose of entering such further orders as it may deem necessary and proper.

BY THE COMMISSION IT IS SO ORDERED.

Albrecht, Chair; Emler, Commissioner; Apple, Commissioner

Dated: SEP 17 2015


ORDER MAILED SEP 18 2015
Amy L. Gilbert
Secretary to the Commission

SRF

¹⁰ *Wallace, Saunders, Austin, Brown & Enochs, Chartered v. Louisburg Grain Co.*, 250 Kan. 54, 61, 824 P.2d 933, 939 (1992), (*Prima facie* evidence denotes evidence which, if left unexplained or uncontradicted, would be sufficient to carry the case to the jury and sustain a verdict in favor of the plaintiff on the issue it supports).

¹¹ K.S.A. 66-118b; K.S.A. 2014 Supp. 77-529(a)(1).

KANSAS CORPORATION COMMISSION
AMENDED FORMAL COMPLAINT
#16-WSEE-066-COM

2015.08.14 09:01:16
Kansas Corporation Commission

STEVEN AND MARY KAY RICKE
104 N TARABURY
WICHITA, KS 67212
316-942-9636
snmkricke@yahoo.com

Received
on

AUG 13 2015

by
State Corporation Commission
of Kansas

July 29, 2015 approximately 9:15AM—A large, bearded man dressed in blue jeans, a yellow construction vest and hat with no logo visible, knocked loudly on our front door. He was holding a round device in his hand and said he was here to change out our meter. We responded that we had not called in a problem and our meter was working. The man stated that "they" are changing all the meters. We refused to let him change the meter as we did not know if he was a scam artist and we did not want a smart meter if he was in fact a legitimate installer. It started to rain and he went back to a gray vehicle and was working out of the back of it. No Westar truck or worker were in sight on our block. We called Westar to report what had happened and they confirmed that Westar had subcontracted meter replacements and allow workers to use their private vehicles and dress casual. Westar never informed via a flyer, in our monthly bill or separate mailing, or automated call that they would be changing out the meters to smart meters in Wichita and that a plain closed worker using a private car may do the work.

I talked with 3 employees of Westar on July 29th, 2015 about Westar's lack of communication and poor customer relations and let them know it was irresponsible behavior and that we did not want a smart meter installed. The customer relation employees were only interested in scheduling a change out of meter and the only reasons given for change out were that it would help the customer by letting them know every hour how much energy they were using and save money and that too many meter readers were getting bit by dogs. They did not state or agree that the data collected could allow Westar know and charge more during the hours that Westar sees as peak hours. (In 2011, Westar published that Lawrence KS residents rates per hour could be raised based on smart meter data.) They did not inform or agree with the possibility of health problems, (EMF sickness), the documented fire and safety hazards, invasion of privacy, data collection, security issues or that the customer should be allowed to refuse a smart meter because of the above mentioned problems. Please read enclosed informative print outs.

We feel Westar is intentionally omitting information about the smart meters to the customer and the installation of them in Wichita. They seem to be in a hurry to get them installed while the KCC is reviewing yet another rate hike. The hike has a direct correlation to being able to pay for smart meters, using the smart meters to monitor and charge more for certain "peak" hours. Westar treatment of its customers in Wichita is disingenuous and acting as a dictator

monopoly. We do not want a smart meter installed and we want the ability to opt out without cost, fees or loss of service. We believe that Westar is purposefully not informing or *acknowledging the health, fire and safety issues of smart meters* and we want to be able to refuse installation of a smart meter because we fear health issues and our house being started on fire because of them and also the hour to hour data that will increase our electric bills. Many people we know were surprised to hear about the health problems, fire issues, and ability for future rate hikes per hour and wished they had refused the installation of the smart meter.

Also, enclosed is a print out that outlines the ease in which smart meters have been hacked by third parties. I highly doubt that Westar is more secure than the Pentagon or other banks and government agencies that have been hacked and we fear that a hacker could easily access our meter and obtain private information or even shut our service off.

Sincerely,

Steve and Mary Kay Ricke

104 N Tarabury

Wichita, KS 67212

316-942-9636

snmkricke@yahoo.com

Complainant requests that the respondent utility be required to provide an answer to the complainant and requests the following action be ordered by the Commission.

We want the KCC to read the enclosed informative print outs and realize they have the power and duty to defend the citizens of Kansas and allow the consumer (Westar customer) the option to refuse installation of a smart meter based on our concern of health issues, fire and safety hazards. We ask the KCC to require Westar to have full disclosure about smart meters based on documented issues that have been raised about the meters capabilities to collect data for rate hikes per hour, meters causing health problems, and fire hazards. The KCC should defend the consumer from being forced to assume risk and give consent to smart meter installation. The KCC should defend the right of the consumer to opt out of smart meter installation with no penalty, fee or loss of service. The consumer needs to be informed by Westar and have the ability to choose voluntarily if they want a smart meter installed. The consumer needs the ability to refuse the risk of hackers shutting off electricity or viewing their private usage and ID data. The consumer needs to have the control to not expose themselves and property to health and fire hazards. We can only do that if the KCC decides to let us, the consumer, have the right to refuse installation of a smart meter with no fees, fines, penalties, or loss of service imposed.

Stevens Riche
Mary Kay Riche

8-10-2015

Received
on

Customers says OG&E Smart Meters making them sick

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by
State Corporation Commission
of Kansas

Posted 9:24 pm, July 23, 2013, by Ted Malave and La'Tasha Givens, Updated at 09:33pm, July 23, 2013

OKLAHOMA CITY — NewsChannel 4 is learning more about nationwide fears involving smart meters and allegations that they can negatively affect your health. According to a group that tracks complaints against smart meters, so far, three states instituted moratoriums on them.

In other states, class action lawsuits were filed and at one time, in California, 47 municipal jurisdictions had demanded a halt to installations of the meters.

The following states have either banned smart meters, have pending legislation against them, or have offered customers the opportunity to opt out. Some for health concerns, others over privacy issues: California, Connecticut, Florida, Georgia, Hawaii, Louisiana, Maine, Maryland, Michigan, Nevada, Oregon, Pennsylvania, Texas and Vermont.

Washing dishes at home is rare for Monique Smith since she doesn't actually live here anymore.

"Immediately I started getting a headache; a really bad headache," Smith says.

She claims the recently installed smart meter forced her out of her home. Within hours of it being installed she says she felt the effects.

"That night I got a really bad headache and as the next day went on I got really dizzy and by the third day I started having nose bleeds," Monique Smith explains.

Not long after, her doctors diagnosed her with Electromagnetic Hypersensitivity Disorder also known as EHS.

Headaches, nose bleeds, muscle cramps, cognitive dysfunction, fatigue, skin irritation and irregular sleep patterns are just some of the symptoms sufferers describe when they are exposed to electromagnetic fields.

Where did this information come from? These are symptoms described by people who believe they are suffering from EHS. They describe a wide variety of symptoms, but these seem to be the ones that are mentioned consistently from state to state.

Also the doctor we interviewed in Dallas, who has been studying this disorder for decades, says these are the symptoms his patients describe most frequently. Some of these symptoms are also listed in both letters that were written by Monique Smith's doctors here in Oklahoma.

Smith started living in a camper a quarter mile down the road to escape what she calls torture.

Smith says, "Prior to the smart meters we had a normal life."

Her husband, Billy, begged OG&E to remove the smart meter but the company refuses to do so.

"OG&E won't even listen to me and I've called them two or three dozen times. They won't even call me back now. They think that we're crazy when in fact the truth is right here; it's evident. I see it every day in my wife," Billy Smith says.

Joe Esposito knows exactly what they're talking about. He also says his smart meter is making him sick.

Esposito founded the website stop smart meters in Oklahoma after his experience.

Esposito says, "I was having pain down my leg for six months, my front teeth, bottom teeth and the roof of my mouth felt like somebody poured Alka-Seltzer at night."

He was able to find a temporary fix to minimize the amount of electromagnetic frequency from the outside meter.

"I put out a sheet of lead around that meter and nailed it to my house," Esposito says.

He says his pain was gone the next day. Meanwhile, Monique's pain is getting worse. One of her doctors of fifteen years even wrote a letter to OG&E.

Saying it's "medically necessary that the smart meter be removed from the home."

Another doctor states, "It may be beneficial to have the smart meter removed"

They said no, they would never do that. It would affect the system or cost individuals too much money to do that.

Billy Smith had a cage constructed for when they have to sleep in the house; like in cases of severe weather.

The cage was named after scientist Micheal Faraday who made advances in the study of electromagnetic fields. Billy Smith says it's their safe haven.

NewsChannel 4 wanted to talk to the doctors who are treating Monique Smith, both of whom had written letters verifying their treatment for her illness, and saying that her smart meter should be removed from her home.

At first both agreed to an interview, but within weeks both cancelled.

All of the doctors working with Monique declined our invitation for an interview so we traveled here to Dallas to meet with Dr. William Rea one of the foremost experts in the country for electromagnetic hypersensitivity disorder."

"I think it's becoming the disaster of the 21st century," Dr. Rea says.

Dr. Rea is an OU graduate and a cardiovascular surgeon who holds other specialties as well; he's treated patients with electromagnetic hypersensitivity disorder for forty years.

"If you have problem with things like the smart meter, you may be getting the wrong impulses, the wrong electrical impulses that come into the body and cause disruption of that synchronized movement that you are supposed to have from electrical impulse," Dr. Rea explains.

He says our cells are protected by membranes which are electromagnetic. They allow crucial materials like calcium, sodium and potassium to pass through.

He believes the frequency from various devices, like smart meters, interrupts this process and causes health problems.

Dr. William Rae says, "My problem is that they should take into account that people are electrical phenomena and that they do run on it and that you can screw up the physiology if you access it improperly if the patient is sensitive."

Dr. Rea has gone to great lengths to keep harmful frequencies out of his practice. The aluminum blinds, porcelain floors, glass shields over walls, keep his patients protected.

"And what does this do in this room?" our reporter asked.

"This screens the electromagnetic so we don't want anything coming from down below," Dr. Rae explains.

"And that way you can properly assess if they are really hypersensitive or not?" we asked.

"That's right," Dr. Rae says.

After our trip to Dallas we sat down with a spokesman for OG&E.

Our reporter asked him, "What is your response to the concern over smart meters potentially affecting people's health?"

"There are a number of measures in place to ensure that these devices are meeting all federal standards," the OG&E spokesman, Alford, says.

"Why is it not possible for the Smith family in particular or any family, who says, 'you know what I don't want this?'" we asked.

"It's much like TV. I can't watch TV anymore with rabbit ears. I have to have digital equipment or I have to be subscriber to cable. There's cost associated in operating in two different worlds," Alford says.

Alford says everyone on the grid living in one area has to use the same technology and out of 800,000 customers, OG&E has only received two complaints.

"It's possible, but it's very, very, improbable," Alford says.

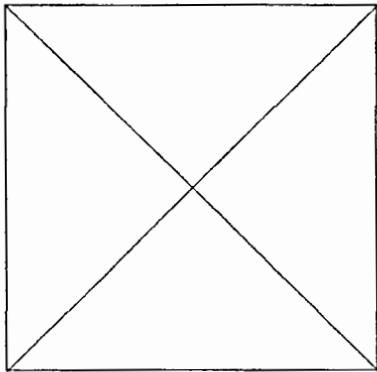
John Fagan, Professor of Engineering at the University of Oklahoma examined six smart meters to weigh in on the topic. He's not sure how the meters could make a person sick.

Professor Fagan says, "I have not been able to find the cause. I have found much greater radiation from cordless phones, cell phones, cell phone towers, TV stations."

It's not much consolation for Monique Smith, who is now, not only worried for her health, but also for her grandchildren who share the same symptoms when they come to visit.

"It's sad when you see little kids. It's just sad when you see them hurting because; what can you do? You can't do anything you have to have the smart meter on your house," Smith says.

We spoke with officials from the CDC about "smart meter sickness." The agency has not released any official stance on the controversy, but they tell us they expect more studies in the future.



Man Dies in Dallas House Fire Attributed to Oncor Smart Meter

Posted on February 4, 2015 by onthelevelblog

Received
on

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by
State Corporation Commission
of Kansas



Last Monday night, another preventable tragedy unfolded as a 74-year-old Dallas man named James Humphrey Jr. was killed in a fire that his family is blaming on a recently installed Oncor smart meter.

The victim's family say the new **smart meters are electrically incompatible with the wiring in older houses**, which is something we have been documenting for years and a fact the utility industry is well aware of.

Our thoughts go out to James Humphrey Jr.'s family and friends and again we ask how many more have to die?

Meters that Endanger: Shocking Details from a Whistleblower

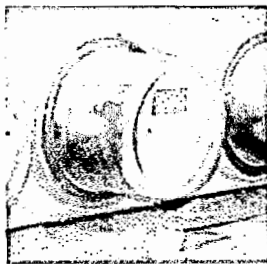
Posted on January 20, 2012 by onthelevelblog



Are smart meters just too complex? Are they veritable blackboxes (well, beige) of assorted electronic components, jury-rigged and thrown together in an off-shore factory, and then slapped onto houses without proper safety testing? Sure, we all have electronic devices in the home, but through this particular device passes all the electrical current for the house. That's a set-up asking for trouble.

From the beginning, smart meters have had problems leading to fires and other electrical dangers. News stories have run all over the U.S. and around the world about installations leading to devastating damage. (Here's a local SF Bay Area fire we'd like to see more fully investigated.)

A lawsuit made available to us recently detailed just how such faulty equipment could end up attached to the electrical wiring on millions of homes. In Alabama in 2009, a Sensus engineering employee named Don Baker was fired for repeatedly alerting his management to the presence of a multitude of dangerous defects in the smart meter they were manufacturing (model iConA). As he states in the complaint he filed, **this whistleblower reported serious flaws in design and functioning that could lead to electrical danger, overheating, and/or fire. In fact, the failure rate of the meters was twenty times higher than it was supposed to be, and the engineer contends that at least two house fires were the result. Sensus meters are used by utilities across the U.S. and in Canada, such as PECO, Alliant Energy, Alabama Power, and NVE.**



In May 2010, Mr. Baker filed a complaint [PDF]. The type of suit is called “qui tam”, where an individual alleges harm to his government. This complaint alleges that the manufacturer and the utility companies received federal monies but provided a defective product. The U.S. Attorney’s office in Alabama declined to pursue the case, because the utility said they had not received federal money for the metering project; but the allegations about the dangerous defects in the smart meters made in the complaint have not been refuted or even addressed.

In the complaint Baker relates in detail what makes the meters dangerous, and the allegations are damning—and alarming. A few highlights:

[Meters] may fail dangerously when subjected to a sudden surge of electricity Meters found to contain ‘flux’ or loose solder residue Calibration equipment not properly designed Electric resistor component defective Internal temperatures up to 200° Fahrenheit Hot socket alarm Drastic overheating to the point of catastrophic failure, melting, and burning....



Cutting corners in business and manufacturing is hardly something new; the difference here is just what is at stake: this product is installed in every house in a utility service area, and the electrical current for the house runs through it. **Even a half-percent failure rate can result in serious amounts of property damage, or even death, given the total number of “customers”—though this word implies a voluntary acceptance of the product, when in fact installation of smart meters has been very largely involuntary. Truly optional consumer goods actually get more testing than smart meters.**

The sort of defects and failures enumerated in this suit might well have been caught with an independent safety-certification process such as Underwriters’ Laboratories (UL). But these Sensus iConA smart meters, and every other type of smart meter, have never been subjected to such testing.

The suit states: "Mr. Baker has direct personal knowledge that Sensus and Southern Company



[the utility] have installed approximately one million iConA meters in Alabama homes **with knowledge that the meters are seriously defective and pose a substantial fire hazard and that at least two Alabama homes have burned as a result....** [They] were well aware that the iConA was defective and the entire project flawed." *[Emphasis ours.]*

Baker submitted the information he had to the Office of the U.S. Attorney and the FBI in Feb 2010. He contends that the defendants named in the suit, Sensus, Southern Company, and Alabama Power, "perpetuated a fraudulent conspiracy" to obtain \$165 million from federal stimulus funding.

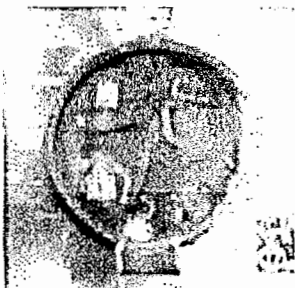
These meters were never tested—for either for safety or performance—instead they went straight to out for installation. Then Sensus altered the components and design—again without safety testing. Only one percent of the Sensus meters were tested—for accuracy only—but never on a house while connected to the grid.



"It quickly became apparent that the meters were fundamentally unsound." Baker states in the filing. "[The contract] carried an acceptable failure rate of 0.5%," but in the first year, the meters were "failing at a rate of 9.0% per year." Baker made reports to Sensus management about quality and safety issues, but he was ignored and eventually fired.

What was technically wrong with the smart meters that Sensus was producing? The suit alleges four categories of defects and failures: 1) Electrical Fast Transient Failures; 2) Flux Contamination and Inaccuracy Issues; 3) Faulty Components; and 4) "Hot Meters." These technical issues are explained below.

The suit goes on to make three charges against the defendants: 1) False Claims; 2) Conspiracy; and 3) Suppression, Fraud, and Deceit. These legal issues are explained in more detail below.



Corporate recklessness—and lack of regulation to curb it—has remained a core issue in the smart meter debacle. From the Silver Springs Network antenna

which increases the power of the radio over FCC limits (see page 14 of this CPUC doc), to arcing problems due to unprofessional installation, to multiple FCC violations, to the lack of any independent safety testing—it is clear that if there had been effective government regulation, it could have changed the face of this “deployment” dramatically.

If you don't like the idea of more government regulation, then how about consumer choice? If individual customers could choose between utilities, even choose their own meter—again, the landscape would also look very, very different.

But instead we are saddled with corporate utility monopolies, aided by government collusion, which adds up to a poisonous combination—whatever your political beliefs might be. It is an arrangement designed to enrich corporations, with impunity.

Why isn't the public up in arms about these risks of smart-meter fires and explosions?

There have been no comprehensive investigations by major media. Early in 2011, a major news station in the SF Bay Area was doing work on this. They interviewed us several times as part of an investigation into smart-meter fires. What happened? The story never aired, and calls to the investigative reporters were not returned.

Without coverage in the mainstream media, people will be left to find out about this issue through social networks or independent media—or worse, suffer their own fire or property damage from the meter.

This is yet another reason why the proposed opt-out here in CA is—even with analogs—incomplete and inadequate. Given the growing evidence of fire risk and safety, this is not a device we should be forced to pay to avoid. **Smart meters should not be installed on any home, any where, without a thorough safety investigation.**

SMART METERS ARE OPTIONAL* IN THE FOLLOWING STATES OR LOCATIONS:

Maine* due to Maine PUC order (read more at [Smart Meter Safety](#)) ME – radio-off smart meter \$20 & \$10.50/mo or electromechanical \$40 & \$12

Fees being challenged legally in Maine - click [here](#) for article and listen to [audio of Oral Arguments](#) before Supreme Court of Maine (30 min)

Michigan [**BREAKING NEWS** The Michigan Opt Out ruling: http://www.w4ar.com/MPSC_decision_June_29_20112_ALLOW_OPT_OUT.pdf]; [\[http://novi.patch.com/articles/public-service-agency-report-recommends-smart-meter-opt-out-option\]](http://novi.patch.com/articles/public-service-agency-report-recommends-smart-meter-opt-out-option)

California* (SDG&E, SCE, PG&E) due to recent CPUC orders (read more [here](#) and [here](#)); \$75 and \$10 month/\$10 and \$5 month (CARE Program) fees being challenged on basis of discrimination laws [Center for Accessible Technology ADA and Smart Meters Brief \(6/29/12\)](#); [CEP Smart Meters ADA Opening Brief \(7/5/12\)](#).

Update 5/20/13: Some alleged harassment of opt-out customers reported in SDG&E territory – people with dogs in fenced yards being told they must not have them in yard 24/7 so access to meter is available 24/7 by SDG&E. One customer told electricity will be shut off if his dogs are found in the yard and spot-checks will be conducted at all hours of the day and night, any day of the week. Also, SDG&E not showing up for appointments to read meters, customers taking whole day off from work to have analog meters read by SDG&E, then meter readers don't show up and reschedule. SDG&E refusing to allow self-reading of meters, even with 30 year previous history of allowing it. Some SCE customers report they are having a hard time obtaining the opt-out even though it was ordered by the CPUC judge last May, 2012. Opt-out proceedings in second phase, to consider costs, discrimination laws as they apply to fees, and community opt-outs. SDG&E and SCE wish to double the fees. Opt-out proceedings appear "stalled". Judge Amy Yip-Kikugawa, the administrative law judge has been silent on these topics, nearing a year on the discrimination aspect of charging medically ill and disabled people to be "allowed" not to be irradiated. PG&E has indicated it is willing to socialize the costs (spread them out amongst the customer base). CEP continues to call for a ban on smart meters but meanwhile requests socializing cost as a means to allow everyone to have an opt-out who wants one. CEP also calling for "zone of safety" for those with medical reasons (removing meters within a zone TBD by customer, around one's home).

Nevada* The Nevada Public Utility Commission has approved an opt-out (late Jan, 2012). NV Energy says it will charge a one-time fee of \$52.86 and a monthly charge of \$8.82 to opt out. Consumers won't be able to keep their existing analog device. The company will provide new, sealed analog meters, which CEP considers "suspicious", as the 1% of consumers with older version electromechanical analog meters will be forced to give them up.

Vermont (free) due to VT state legislature bill S. 214 signed into law by governor (read more about it [here](#) – [Vermont Legislature Eliminates Smart Meter Opt-Out Fee](#))

Kaua'i, Hawaii (free) due to recently settled federal lawsuit against energy co-op KIUC – read more [here](#). [Unconfirmed: KIUC has agreed to provide this for one litigant, and possibly, for others.]

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Ashland, OR (free) city council voted to establish a free opt-out, rejecting city-owned Ashland Electric Dept's request for fees. (Read more [here](#).)

Portland*, OR – \$254 & \$51/mo

Lafayette, Louisiana (temporarily free) city council voted to establish free opt-out (till Nov. 2012) for city-owned Lafayette Utilities System – read more [here](#)

*for a fee

(to alert us to additional opt-out states or locations email us at info@electrosmogprevention.org and place Opt-out Location in the subject line)

SMART METER OPPOSITION ACTIONS ACROSS THE UNITED STATES

AS OF MAY 29, 2012, list with details provided by [Center for Safer Wireless, VA](#)

other lists at [Smart Meter Activism Sites – CA and USA](#)

PENDING FREE SMART METER OPT-OUT LEGISLATION

State Legislature of **Georgia, USA** – read more [here](#) at [StopSmartMetersGeorgia](#)

Virginia: Jan. 2012: Senator Garret has introduced [SB797](#) which prohibits electric utility companies from installing a smart meter on a customer's premises or requiring a customer to use any advanced meter unless the customer has requested it. More info at www.centerforsaferwireless.org/.

The bill: <http://lis.virginia.gov/cgi-bin/legp604.exe?131+sum+SB797>

PENDING PUC'S CONSIDERING SMART METER OPT-OUTS

Texas PUC – read more [here](#) and go to [Ban Texas Smart Meters](#) for more info

Florida PUC -

Naperville*, IL - WARNING FROM NAPERVILLE RESIDENT : \$68.35 & 24.75/mo for a "dangerous, powerline-communications" opt-out

Smart Meters are NOT optional in Naperville. We are NOT allowed to keep our analog meters which is why *we re-filed our federal lawsuit and still fighting the city*. The only "option" is a different kind of smart meter which is "wired" to the power lines and is therefore still creating harm, sickness and are an invasion of privacy (still collects and stores all private data).

We have no options here except to have a smart meter forced on us or get arrested.

The City is using the term "opt-out" to mislead and conceal what is really going on from the public.

CALIFORNIA LOCAL ORDINANCES AGAINST SMART METERS

[57 California Smart Meter Local Ordinances Banning or Criminalizing Smart Meter Installations](#)

SMART METER ACTIVISM IN USA AND INTERNATIONAL

For a growing list of state-by-state organizations fighting to obtain opt-outs and bans, click [here](#)

CA AND FEDERAL LAWS SHOWING SMART METERS AND FEES ILLEGAL, TO ASSIST YOU

For a list of CA and federal laws that show mandatory smart meters and opt-out fees are discriminatory and illegal, click [here](#)

(to alert us to additional opt-out laws that we may post herein email us at info@electrosmogprevention.org and place Smart Meter Laws in the subject line)

Both California state and federal laws support nondiscrimination against disabled persons and/or those with medical conditions. This pertains to disabled persons and use of public services, applies to states and their agencies (CPUC) (which have no immunity if found to violate) and recipients of state or federal funding ([the utilities in many states received Recovery Act money by the billions to develop smart meters and the smart grid](#)). To look up the individual grant recipients and grants, go to <http://www.recovery.gov/Pages/default.aspx>.

CEP asserts that all citizens and thus, all residential customers, are protected from paying opt-out fees by [California Public Utilities Code 453](#).

It is the position of CEP that a broad segment of the population who may be considered as people with disabilities (on record or regarded as having physical or mental impairments), and/or medical conditions, and/or specific mental and physical characteristics are clearly protected by either or both the ADA and [California Public Utilities Code 453\(b\) \(Section 453\)](#), as well as a host of other, similar federal and state discrimination laws, including, but not limited to [CA Government Codes Civil Code Section 51 \(Unruh Civil Rights Act\)](#), [Section 11135, CA Government Code Section 12926, Section 508 of the federal Rehabilitation Act of 1973, as amended \(29 U.S.C. Sec. 794d\)](#), and regulations implementing that act as set forth in Part 1194 of Title 36 of the Federal Code of Regulations, and section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112, 87 Stat. 394 (29 U.S.C. 794), as amended, from being charged extra fees and costs to opt-out from wireless smart meters.

These are the federal assurances that utility companies agree to follow when getting the Smart Grid grants:

[Reference: Naperville Smart Grid Initiative Question/Response Inventory, dated March 25, 2013.]

How does the above statement compare with the facts? Does the smart meter only measure consumption of electricity for billing purposes?

First of all, we have the comments by Naperville City Council member Robert Fieseler on August 16, 2011, at a City Council meeting, where he stated, "No one is able to opt-out of this program the way it's now set up. You'll get a new meter. The contract we have with the Department of Energy and the funds that we've accepted and the obligations that we have in my view require us to have the 57,323 meters. **We do need each meter on each house because we need to be able on a point by point basis know who is using what electricity when. We also need to know whose electricity is on or not.**" ... *Why? Why do you need to know this?*

The above statement would strongly suggest that the utility is collecting much more data than are required for billing purposes. Below is a link/play button for the actual audio recording from the City Council meeting. Listen for yourself.

Audio Player

00:00

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Use Up/Down Arrow keys to increase or decrease volume.

How can the City state that with a smart meter, "... only the consumption of electricity is measured for billing purposes."? The smart meter utilized by the City of Naperville collects usage data of a granular nature every 15-minutes. Thus, if you do the math, this same digital smart meter records a consumer's electrical usage up to 2,976 times per month. For a customer with a traditional fixed-rate pricing program, only one (1) consumption data point needs to be measured and recorded per month for billing purposes. The City of Naperville thus records almost 3,000 times more consumption data than required for billing purposes. What is wrong with this picture? The public relations claims do not line up with the facts, ... or the "truth."

for text alerts to notify them when their bills reach a certain dollar amount or if there are uncharacteristic spikes in energy use.

The SmartStar Dashboard will be available one day after the smart meter is installed.

[Reply](#)



Posted by [Christine Metz](#) on October 3, 2011 at 6:41 p.m.

As smart meter use grows in Kansas, so do options

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By Christine Metz

Lawrence Journal-World

by
State Corporation Commission
of Kansas

Published: Thursday, Feb. 3 2011 12:00 a.m. MST

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**** ADVANCE FOR WEEKEND EDITIONS FEB. 4-6 **** In this Jan. 11, 2011 photo, Jhon Valdez installs Westar Energy's new SmartStar meters at the Graystone Apartments in Lawrence, Kan.

The Lawrence Journal-World, Mike Yoder, Associated Press

[Enlarge photo»](#)

Summary

For many Kansas electric cooperatives — the energy providers that serve the state's most rural areas — smart meters are old news.

LAWRENCE, Kan. — For many Kansas electric cooperatives — the energy providers that serve the state's most rural areas — smart meters are old news.

In Lawrence, the community is just learning about the meters, and some questions are being raised on how they will affect electric bills and customers' privacy.

Westar Energy is spending \$40 million to install 45,000 smart meters in Lawrence this year and establish the backbone of its system's smart grid.

Eventually customers will be able to go online and see how much electricity they use by the hour. With this knowledge, Westar hopes that Lawrence residents will do a better job of conserving it, which in the future could delay the need for Westar to build more power plants.

Combined, 10 of the state's 29 electric co-ops have installed almost 72,000 smart meters, about 25 percent of all their meters, said Dave Holthaus of Kansas Electric Cooperatives, the organization that serves all Kansas co-ops. He defines a smart meter as one that provides two-way communication between the home and the electric provider.

Co-ops like being able to access the meters remotely, Holthaus said, and customers like the added information they provide.

"If it makes really good sense on both sides of the meter, chances are it is only going to expand," he said.

So far, none of the co-ops offers anything nearly as elaborate as what Westar will have online for its Lawrence customers, providing information on hour-by-hour energy usage as soon as the next day.

For many of the co-ops, a customer who wants a read-out of his or her daily usage must call to the co-op to request it.

That's what customers at Kaw Valley Electric do. The co-op, which has about 1,000 meters in Douglas County, has been replacing mechanical meters with digital ones as its meter readers retire. So far, about half of the co-op's 4,000 meters are digital.

"Information storage is an issue. We were reading meters once a month. Now it's every five minutes," said Kevin Gregg with Kaw Valley Electric. "You come up with quite a bit of information, then it is a matter of how do you store it and what do you do with it?"

As of now, the co-op records energy usage once a day.

The Heartland Rural Electric Cooperative in Girard was the first to put in the early versions of smart meters in 2003. The big draw to smart meters is the ability to read them remotely, an attractive option for co-ops that have service areas that encompass several large counties, Holthaus said. Smart meters also make it easier to detect power failures, and to disconnect and turn on power.

Leavenworth-Jefferson Electric Cooperative, which has a few dozen customers in Douglas County, started installing smart meters six months ago at customers' request.

"Consumers in general are looking for ways to save on their energy bill and are looking for ways to be helpful with the environment," said Jennifer Fisher with the co-op. "They wanted more options."

By 2012, the co-op expects to convert all of its 8,000 meters to smart meters. The cost to do so is \$1.5 million.

With the new meters, customers can get a time-of-use rate. At LJEC, the standard rate is 10.81 cents per kilowatt hour every hour of the day seven days a week. This is how customers typically purchase electricity.

However, with the time-of-use rate, customers have to pay a higher rate (17.89 cents per kilowatt hour) when they use electricity from 3 p.m. to 8 p.m. Monday through Friday. Any other time, customers pay a lower rate of 8.45 cents a kilowatt hour.

The hope is that the higher rate will encourage customers to use less energy during the times of highest demand (usually in the late afternoon) when the co-op has to pay more for the energy it sends through the grid.

Of the 1,600 smart meters the co-op has installed so far, around 100 customers have signed up for time-of-use pricing.

"I think once folks have the chance to look at the benefits of the time of use rate and the kind of money it saves them more people will absolutely get on board," Fisher said.

After smart meters are installed in Lawrence, Westar plans to offer a similar concept as a pilot program for volunteer customers.

Elsewhere throughout the state, co-ops have offered preferred rates to farmers and industrial users. For a lower rate, the co-op can shut down the farmer's irrigation system during times of peak demand and then turn it back on when the demand goes down.

Across the country, the deploying of smart meters have been met with some backlash. Concerns have been raised about increased radiation exposure, privacy issues and faulty calculations in how much electricity was actually being used. In California, some cities have placed moratoriums preventing electric companies from installing the devices until more research was done.

But so far the co-ops in Kansas haven't had to face any of those concerns, Holthaus said. And of the 100 customers who have decided to do time-of-use pricing, Fisher said just one or two have dropped out.

"This is going on nationwide, it really is," Fisher said. "This goes back to the consumer really wanting more choices."

Information from: Lawrence Journal-World,

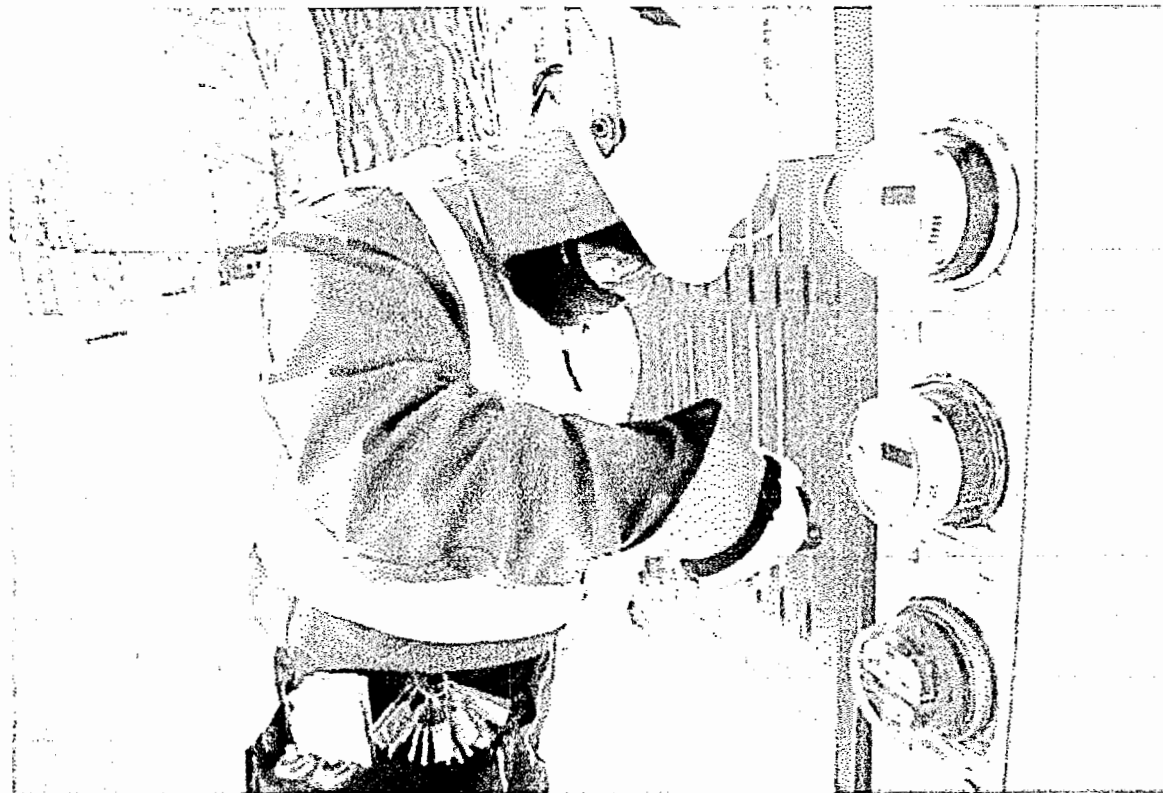
Posts tagged with Smart Meters



Posted by Christine Metz on October 17, 2011 at 11:02 a.m.

- [permalink](#)

Westar begins citywide hookup to smart grid today



John Valdez installs Westar Energy's new SmartStar meters Tuesday, Jan. 11, 2011, at the Graystone Apartments in Lawrence. *by Mike Yoder*

Starting today, Lawrence will get a little smarter. Well, at least the electric meters in the city will. Westar Energy is beginning the mass installation of smart meters, a new technology that will mean no more drive-by meter readings, and energy usage information on 15-minute intervals.

The meters, all 44,000 of them, are part of the \$40 million SmartStar project. Half of the meters are being covered by federal stimulus dollars. Over the past several years, our readers have had many questions about the technology.

Here, with the help of Westar's SmartStar director Hal Jensen and director of meter operations Kevin Heimiller, we answer some.

When can I expect to see a smart meter installed at my house?

Westar will start installing the smart meters this morning. The meters should be installed in all residential neighborhoods by the end of the year. Of course, bad weather could extend that time line. Those with hard-to-access meters might not get a new one until after Jan. 1.

The first meters will go in the south-central part of Lawrence, between 19th and 31st streets. From there smart meters will be deployed based on billing cycles.

How will I know when my meter is exchanged?

Before each exchange, Westar's installation crews will knock on the customer's door to notify them of the switch, explain the process and leave a packet of information. If no one is home, crews will go ahead and exchange the meter and then leave a packet of information that explains the SmartStar project and how to access the meter's detailed online data.

On the SmartStar website (smartstarlawrence.com), Westar plans to keep customers up to date on which neighborhood is scheduled next to have the smart meters installed.

The power will go out for about a minute while the meter is being exchanged. It shouldn't be much different than any other momentary power outage. If Westar can't gain access to the meter, workmen will leave a phone number, 855-782-7663, asking the homeowner to set up a time for them to complete the meter exchange.

What if I don't want a smart meter?

Westar doesn't have an opt-out option because the existing drive-by meter reading system will no longer have the technology to support it, Jensen said.

While customers won't have to do anything different with the new meters, Jensen said it will give Westar more information about when power failures occur and what caused it.

Will my rates change?

One of the benefits of smart meters is the ability to establish a billing structure where electricity is most expensive at the times when it is in highest demand. Often those peaks occur on hot summer afternoons.

By next summer, Westar plans to offer different pricing plans that would link rates to demand.

However, Jensen said pricing plans would be voluntarily, not mandatory. So, a flat rate would still be available.

"I think we would much rather go down a path of offering customers choices and options. And, then seeing if we can provide appropriate incentives to attract large enough groups of people," Jensen said.

And, any of the optional plans would have to receive approval through the Kansas Corporation Commission.

Over time, everyone's rates will likely go up to cover the Lawrence smart meter project. Westar has filed a rate case with the KCC. Westar is asking the KCC to decide whether it can recover its

\$20 million piece of the project through customer rates. The cost would be covered by all of Westar's customers.

Can Westar sell the data it gathers with my smart meter?

Westar will abide by the same privacy regulations that it does today, meaning a customer's usage information and billing information is shared only with the company and customer.

"We will not sell or disclose information to other third parties unless a customer requests it," Jensen said. Of course, if Westar is subpoenaed to release energy data information for legal reasons, it will do so.

Are there any negative health effects related to smart meters?

In California, customers have opposed a massive rollout of smart meters based on concerns of the effects from the meter's electromagnetic waves. Coupled with other wireless technologies, such as cellphones, those opposing smart meters worry about the potential for health problems.

Westar claims the smart meters being installed in Lawrence have the same strength of radio frequency or less as a baby monitor or garage door opener. The smart meter transmits a signal for less than 10 seconds a day.

The radio frequencies from the smart meters are similar to the meters in operation in Lawrence homes now, Heimiller said.

"We've had them in since 1996, and we haven't had any issues at all," he said.

Will Westar be able to control my power through a smart meter?

Westar's SmartStar program is sometimes confused with its WattSaver program. The WattSaver program is a voluntary program that provides a free programmable thermostat to customers. In return, Westar has the ability to cycle on and off air conditioners in 15-minute intervals during the hottest times of the year. This process allows Westar to reduce energy usage during peak times. During last summer's string of 100 degree days, WattSaver used this option about six times.

Smart meters have nothing to do with the WattSaver program. The meters don't have any control features, Jensen said. It is either on or off. It also doesn't gather data on individual appliances. It reads a home's overall energy usage. "There is no ability to limit power. It is not a function to control anything individually within the house," Jensen said.

How do I access information from my smart meter?

Customers who want to tap into the smart meter's data need to log into their Westar online account. To do so, go to WestarEnergy.com and click on "My Account." From there, you will be directed to the SmartStar Dashboard. If you don't have an online account, you can set one up at WestarEnergy.com. You will need your account number.

The dashboard will allow you to see energy use in 15-minute increments and in daily summaries. Data won't be displayed in real time, but will be available the next day. Customers can sign up

Fooing your meter so you get to save on the electricity bill is illegal and down right unethical.

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The Growing Threat of Smart Meters



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Sustainable Development is code for a policy designed to transform human society, essentially eliminating individual life decisions and replacing them with top – down, one-size-fits-all government control. In steady fashion, the agenda for this new policy, designed at the international level, is put into place piece by piece with a new government council here, and new regulation there, each designed to appear as a “local” development program. Like the proverbial frog in the slowly boiling pot, many Americans fail to notice the rise in government heat.

The main course of action to impose the new agenda is through the pretense of environmental protection; “Sorry about your rights, but if we don’t save the planet, then we will all perish!” And so with the devastation of a thousand pin pricks, America and its form or government is being changed through the creation of non-elected boards, councils and regional governments, designed to enforce the new regulations and “assure that we protect the environment.”

The pin pricks come disguised as such issues as controls on community development; controls on use of private property; controls on use of open space; creation of development areas, many times under the excuse of historic preservation; communities designed on the blue print of pack and stack housing; making it harder to drive as roads are narrowed, even forcing cars to share the

road with bicycles; the enforcement of expensive mass transit boondoggle projects; and the never ending spending spree on inefficient, unworkable alternative energy, such as wind and solar power.

In fact, control of energy and water are the two most effective tools in the enforcement of the Sustainable Development agenda. Without energy and water, human society stops. Using strict controls on how, or even if, energy and water can be used provides government with the power to dictate every aspect of society.

So how is that control carried out? There are obviously several ways, including regulations and taxes on production of gasoline; EPA restrictions on energy production; and government subsidies to create and enforce the use of alternative energy, specifically wind and solar.

However, controlling energy use in individual homes provided a more difficult obstacle than mere taxes or regulations. Government needed to be able to monitor energy use and individual habits in every single home. And so, the Smart Meter was born.

The Smart Meters are being installed on homes across the country, replacing the old style analog meters. The power companies are telling their customers that the Smart Meters will help them save money on electric bills by helping control usage. They also claim that the Smart Meters will help the power companies operate more efficiently by eliminating the need for meter readers to physically read the meters as they do with analog meters. However, these sales pitches from the power companies hide the real facts behind the push to replace every analog meter in the nation with the Smart Meters.

There are several major problems for homeowners as the Smart Meters are installed. Here are just a few:

- The cost of heating and cooling homes with Smart Meters is going up because of the inefficient alternative energy that is more expensive than coal and nuclear power.
- Homeowners with Smart Meters in place are discovering that they can't heat or cool their homes during peak power usage as the electric companies control the thermostats and automatically cut back on usage.
- Property rights are being violated by Smart Meter installers who come onto property against the will of the owners.
- A 2012 Congressional Report now reveals that power companies are able to read data from the meters that reveals residents' daily schedules and their personal behavior, the types of appliances they use, even if there are certain types of medical equipment in use in the home. This information can then be sold to private concerns or placed in government files. It can lead to identity theft and unwarranted government surveillance.
- Evidence is now emerging that the Smart Meters, which operate by emitting electromagnetic signals, has become a health hazard, as thousands of Smart Meters in neighborhoods blast a non-stop signal, creating what is called Electromagnetic Smog. The electromagnetic radiation is dangerous for the elderly, children, pets, and those subject to such disorders as epilepsy, heart disease and more. It can lead to disruptive sleep patterns, chronic fatigue, depression, headaches and much more.

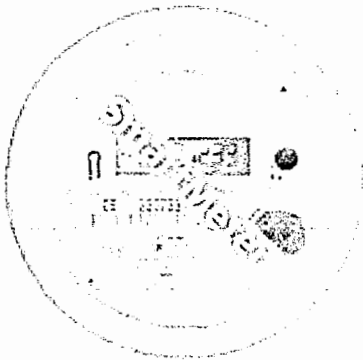
As Americans become aware of these threats they have begun to oppose the installation of Smart Meters on their property. Some local and state government's, when faced with the health

complaints, have offered opt out provisions. Others have responded using force, resulting in arrests, as in Naperville, Illinois. In other places, power companies have shut off electricity to homes of those protesting the Smart Meters.

As the battle against the Smart Meters grows across the nation, Americans need to understand the issue, the dangers, the real reasons behind the government's drive to force them on angry and protesting homeowners, violating their property rights and endangering their health in the process.

SPECIAL REPORT

**Sustainable Development
and the Control Of Energy:**
The growing battle over Smart Meters



Produced by:



as well, [click here to download](#)

Every American has a duty to preserve freedom by protesting and stopping the forced installation of these devices.

[Click here to purchase our Special Report](#)

Smart Meters are designed to provide government with detailed information of your energy use, your movements in your home, the way you use your personal private time, and even how many people are in your home at any given time. It is an unconstitutional invasion of your home by government, as set down in the Fourth Amendment to the U.S. Constitution.

My organization, the American Policy Center (APC), has produced a comprehensive special report entitled "Sustainable Development and the Control of Energy (The growing battle over Smart Meters)." This report details the real reasons behind the government's enforcement of the Smart Meters, the health and privacy violations, and the political agenda behind it all. This special report is available for sale on our web site at <http://americanpolicy.org/smart-meter-booklet> I urge every concerned American to get a copy. To preview this booklet we also have a free PDF (digital version) of the entire booklet available for download

How privacy-conscious consumers are fooling, hacking smart meters

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There is even a
youtube that demonstrates
how to HACK your home
Smart meter!

by: Aurora Geib

(NaturalNews) The recent roll out of smart meters has brought about mixed reactions from consumers. On one hand, there are activist groups broadcasting the health and privacy concerns that smart meters may potentially have. On the other, the utility companies are championing the advantages of smart meters in the face of a \$3.4 billion fund stimulus given by the government for smart grid technologies (it sure is nice of them to be advocating energy savings while they line their pockets with all that money from the government).

Curiously, in all this haste to accomplish the government's energy program, no federal safeguards seem to have been designed to protect customer information from being accessed by others – information that smart meters could be sending (the activist group may have a point on this one). Worse, it appears that smart meters themselves are not an impregnable fortress – the meter can be subject to hacking.

Smart meters hacked in Puerto Rico

In 2009, the Federal Bureau of Investigation investigated widespread incidents of power thefts in Puerto Rico believed to be related to smart meter deployment. The FBI believed that former employees of the meter manufacturer and employees of the utility company were tampering with the meters charging between \$300 to \$1,000 to reprogram residential meters and \$3,000 to reprogram commercial meters.

The perpetrators were said to have hacked into the smart meters using an optical converter device connected to a laptop, allowing smart meters to connect with the computer. The hackers were able to change the settings for recording power consumptions using software available on the internet after making a connection. This method does not require the removal, alteration or disassembly of the meter.

Another recent example of smart meter hacking was demonstrated by Mike Davis, a security consultant. He reverse-engineered a meter bought on Ebay and installed a computer program that replicated itself across the wireless network and blocked the utility company as it went. Jack Bode, writing for Canada.com, made the wry observation that we won't have to worry about getting bombed if ever we go to war again. The enemy only has to "hack us and turn off the power."

Fooling smart meters

The old ways of tampering with analog meters may no longer apply to smart meters. One of the reasons smart meters were employed was to curb electricity theft. In fact, it is estimated that millions of dollars are annually lost due to electricity theft.

Nevertheless, the Puerto Rico incident demonstrates that a smart meter can still be vulnerable to attack using a simple laptop, an optical converter device and a program that can be downloaded from the internet. To date, this is probably the best proven way to fool a smart meter.

At the cost of sounding unscrupulous, the following are some suggestions made by experts on how to fool a smart meter:

1) Attacking a smart meter's memory-through hardware – If a smart meter hasn't been built with protective features, inserting a needle on each side of the device's memory chip can do the trick. The needle intercepts the electrical signals in the memory chip. From these signals, a device's programming can be determined. If security features are in place, it is still possible to obtain the data through customized tools.

2) Using a digital radio – The two-way radio chip in a smart meter allows the device to be read remotely and receive commands over the network. A hacker, who has cracked the meter's programming, can use security codes from the software in the chip to get on the network and issue commands.

3) Accessing the meter – Another method of hacking the smart meter is through a wireless device. Using a software radio programmed to mimic a variety of communication devices, a hacker can listen in on wireless communications in the network and guess over time how to communicate with the meter. Another method is to steal a meter and reverse-engineer it; although inexpensive, the process would require a good knowledge of integrated circuits.

4) Spreading malware to the network – With access to the smart meter's programming codes, it is possible to connect with all other meters in the network that have the same brand. David Baker, director of services for IOActive, a Seattle-based research company, demonstrated this possibility when he designed a virus that could replicate itself in other meters and enable a hacker to shut down the system remotely. In simulations, Davis was able to show that if his malware were to be released in a location where all the houses were fitted with the same brand of meter, it could spread to 15,000 homes in 24 hours.

5) Measuring electrical consumption – Inside smart meters are sensors that measure energy consumption. Under the old mechanical meters, interfering with the meter's ability to report accurately has been the means of many unscrupulous individuals to save money on electricity, like by the use of magnets. The old method used with analog meters may not be difficult to use in fooling the old meters but the new generation of smart meters were designed to protect against such automated methods.

Caveat

If only for the sake of discussion, the main point in discussing how to fool a smart meter is only for the purpose of guarding privacy in the home. This article is not intended to aid or abet criminal activity.

Privacy and Cyber Security

Privacy and cybersecurity issues, due to the granular nature of data collected through the use of digital smart meters, have been well documented. Here is a quotation from a National Institute of Standards and Technology (NIST) document published in August 2010:

“Smart meter data raises potential surveillance possibilities posing physical, financial, and reputational risks. Because smart meters collect energy data at much shorter time intervals than in the past (in 15-minute or sub-15-minute intervals rather than once a month), the information can reveal much more detailed information about the activities within a dwelling or other premises than was available in the past. This is because smart meter data provides information about the usage patterns for individual appliances—which in turn can reveal detailed information about activities within a premise through the use of nonintrusive appliance load monitoring (NALM) techniques.... For example, research shows that analyzing 15-minute interval aggregate household energy consumption data can by itself pinpoint the use of most major home appliances. ... NALM techniques have many beneficial uses, including pinpointing loads for purposes of load balancing or increasing energy efficiency. However, **such detailed information about appliance use can also reveal whether a building is occupied or vacant, show residency patterns over time, and reflect intimate details of people’s lives and their habits and preferences inside their homes.**” [emphasis added]

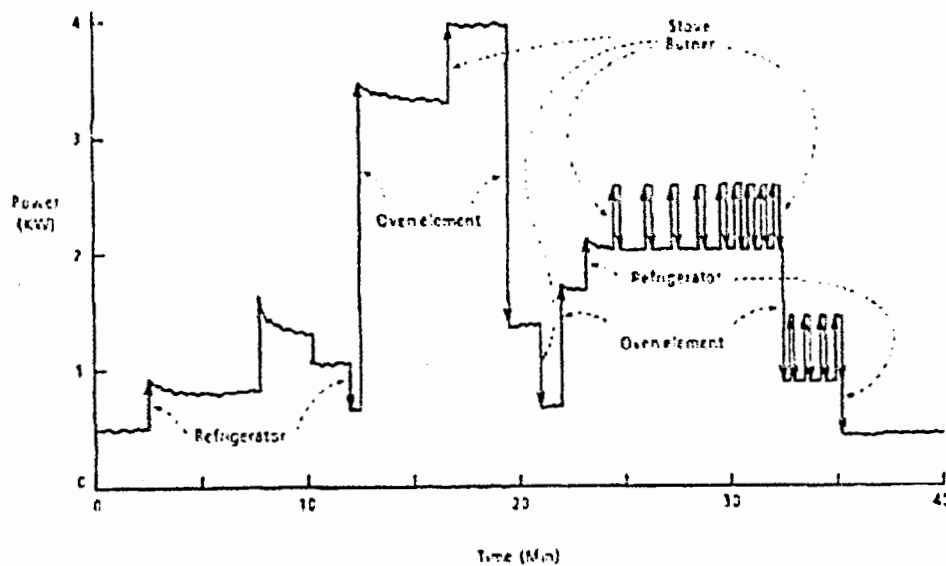
Full Reference for the above quotation: NISTIR 7628, “Guidelines for Smart Grid Cyber Security: vol. 2, Privacy and the Smart Grid,” August 2010, pp 13-14.

According a 2009 report for the Colorado Public Utilities Commission, entitled, “Smart Metering & Privacy: Existing Law and Competing Policies,” it was stated that “insufficient oversight of this [smart metering] could also lead to **unprecedented invasions of consumer privacy. Many intricate details of household life can be gleaned from information obtained via advanced metering infrastructure.**” [emphasis added] This statement was followed with the figure shown below.

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Example of an individual's load profile constructed using consecutive load measurements taken in small intervals with various appliance events identified.

In January 2011, the US Government Accountability Office issued a document entitled, GAO Report #GAO-11-117, "Electricity Grid Modernization." Summary information for the report includes the following:

"GAO identified the following six key challenges:

- 1) Aspects of the regulatory environment may make it difficult to ensure smart grid systems' cybersecurity.
- 2) Utilities are focusing on regulatory compliance instead of comprehensive security.
- 3) The electric industry does not have an effective mechanism for sharing information on cybersecurity.
- 4) **Consumers are not adequately informed about the benefits, costs, and risks associated with smart grid systems. [emphasis added]**
- 5) There is a lack of security features being built into certain smart grid systems.
- 6) The electricity industry does not have metrics for evaluating cybersecurity."

For the full report, refer to the following link: <http://www.gao.gov/new.items/d11117.pdf>

Specifically for the City of Naperville, Illinois, government officials generally state that smart meters cannot determine the personal habits of residents. For example, in response to the question, "Can the utility monitor my consumption and know when I'm home?" ... the response was, "The utility cannot detect the presence of people in their homes; only the consumption of electricity is measured for billing purposes."

[Reference: Naperville Smart Grid Initiative Question/Response Inventory, dated March 25, 2013.]

How does the above statement compare with the facts? Does the smart meter only measure consumption of electricity for billing purposes?

First of all, we have the comments by Naperville City Council member Robert Fieseler on August 16, 2011, at a City Council meeting, where he stated, "No one is able to opt-out of this program the way it's now set up. You'll get a new meter. The contract we have with the Department of Energy and the funds that we've accepted and the obligations that we have in my view require us to have the 57,323 meters. **We do need each meter on each house because we need to be able on a point by point basis know who is using what electricity when. We also need to know whose electricity is on or not.**" ... *Why? Why do you need to know this?*

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CRS Report for Congress

Prepared for Members and Committees of Congress

Smart Meter Data: Privacy and Cybersecurity

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Smart Meter Data: Privacy and Cybersecurity
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Summary

Fueled by stimulus funding in the American Recovery and Reinvestment Act of 2009 (ARRA), electric utilities have accelerated their deployment of smart meters to millions of homes across

services involved and whether the customer actually assumes the risk or consents to this

information being shared with others. Assumption of the risk and consent are the two leading theories supporting the third-party doctrine. In *United States v. Miller*

, the customer "assumed the risk" that the bank would turn over the bank records to government authorities.

193

That was a risk he took in doing business with the bank. As to the consent theory, one commentator asked and answered the question as follows: "When does a person's choice to disclose information to a third-party constitute consent to a search? So long as a person knows that they are disclosing information to a third-party, their choice to do so is voluntary and the consent valid."

194

With banking or telephone services, a customer has the option of transferring his business to another bank or another telephone carrier.

195

To the contrary, because electric utilities are essentially monopolies, the customer cannot simply switch services. The only way to avoid the recordation of his electric usage is to terminate his utility service altogether, an impracticable

option in modern society. As one state court has noted:

Electricity, even more than telephone service, is a "necessary component" of modern life,

pervading every aspect of an individual's business and personal life: it heats our homes Smart Meter Data: Privacy and Cybersecurity

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22

powers our appliances, and lights our nights. A requirement of receiving this service is the

disclosure to the power company (and in this case an agent of the state) of one's identity and

the amount of electricity being used. The nature of electrical service re

quires the disclosure

of this information, but that disclosure is only for the limited business purpose of obtaining

the service.

196

It is not clear whether assumption of the risk or consent should apply to smart meters. It is reasonable to assume that customers understand utility companies must collect usage data to bill the customer for that usage. ~~Customers receive their statement each month demonstrating this fact. However, most customers are probably not familiar with the sophistication of smart meters and the detailed data sets that can be derived from them. Even if customers are aware their utility usage can be recorded in sub-fifteen minute intervals, a reasonable customer would probably be surprised, if not shocked, to know that data from smart meters can potentially be used to pinpoint the usage of specific appliances. If knowledge of the sophistication of the data is a prerequisite to assumption of the risk or consent, it is difficult to say whether a reasonable customer would understand the privacy implications with this new technology.~~

197

Because smart meters are an emerging technology not yet judicially tested, *it is difficult to* conclude with certainty how they would be handled under the Fourth Amendment. Further, beyond the possible constitutional implications of smart meters, federal communication and privacy statutes may also apply. As noted by Professor Kerr, "in recent decades, legislative privacy rules governing new technologies have proven roughly as privacy protective, and quite often more protective than, parallel Fourth Amendment rules."

19

Act (SCA), the Computer Fraud and Abuse Act (CFAA), and the Electronic Communications Privacy Act (ECPA). If smart meter data is protected by these statutes, law enforcement would still appear to have the ability to access it for investigative purposes under procedures provided in the SCA, ECPA, and the Foreign Intelligence Surveillance Act (FISA).

Smart Meter Data: Privacy and Security Concerns

Residential smart meters present privacy and cybersecurity issues

¹⁹ that are likely to evolve with the technology.

²⁰ In 2010, the National Institute of Standards and Technology (NIST) published a report identifying some of these issues, which fall into two main categories: (1) privacy concerns that smart meters will reveal the activities of people inside of a home by measuring their electricity usage frequently over time;

²¹ and (2) fears that inadequate cybersecurity measures surrounding the digital transmission of smart meter data will expose it to misuse by authorized and unauthorized users of the data.

Detailed Information on Household Activities

²² Smart meters offer a significantly more detailed illustration of a consumer's energy usage than regular meters. Traditional meters display data on a consumer's total electricity usage and are typically read manually once per month.

²³ In contrast, smart meters can provide near real-time usage data by measuring usage electronically at a much greater frequency, such as once every 15

¹⁸ For additional information on the development of mandatory national smart grid privacy and cybersecurity standards by federal agencies, see M
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minutes.

24

Current smart meter technology allows utilities to measure usage as frequently as once every minute.

25

By examining smart meter data, it is possible to identify which appliances a consumer is using and at what times of the day, because each type of appliance generates a unique electric load "signature."

26

NIST wrote in 2010 that "research shows that analyzing 15-minute interval aggregate household energy consumption data can by itself pinpoint the use of most major home appliances."

27

A report for the Colorado Public Utilities Commission discussed an Italian study that used "artificial neural networks" to identify individual "heavy-load appliance uses" with 90% accuracy using 15-minute interval data from a smart meter.

28

Similarly, software-based algorithms would likely allow a person to extract the unique signatures of individual appliances from meter data that has been collected less frequently and is therefore less detailed.

29

By combining appliance usage patterns, an observer could discern the behavior of occupants in a home over a period of time.

30

For example, the data could show whether a residence is occupied, how many people live in it, and whether it is "occupied by more people than usual."

31

According to the Department of Energy, smart meters may be able to reveal occupants' "daily schedules (including times when they are at or away from home or asleep), whether their homes are equipped with alarm systems, whether they own expensive electronic equipment such as plasma TVs, and whether they use certain types of medical equipment."

Increased Potential for Theft or Breach of Data

Smart grid technology relies heavily on two-way communication to increase energy efficiency and reliability, including communication between smart meters and the utility (or other entity) that stores data for the grid.

46

Many different technologies will transmit data to the grid, including "traditional twisted-copper phone lines, cable lines, fiber optic cable, cellular, satellite, microwave, WiMAX, power line carrier, and broadband over power line."

47

Of these communications platforms, wireless technologies are likely to play a "prominent role" because they present fewer safety concerns and cost less to implement than wireline technologies.

48

According to the Department of Energy, a typical utility network has four "tiers" that collect and transmit data from the consumer to the utility.

49

These include "(1) the core backbone—the primary path to the utility data center; (2) backhaul distribution—the aggregation point for

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neighborhood data; (3) the access point—typically the smart meter; and, (4) the HAN—the home network."

50

Energy usage data moves from the smart meter,

51

and then to an "aggregation point" outside of the residence such as "a substation, a utility pole-mounted device, or a communications tower."

52

The aggregation points gather data from multiple meters and "backhaul" it to the utility using fiber, T1, microwave, or wireless technology.

53

Utilities typically rely on their own private networks to communicate with smart meters because they have found these networks to be more

reliable and less expensive than commercial networks.

54

As NIST explains, consumer data moving through a smart grid becomes stored in many locations both within the grid and within the physical world.

55

Thus, because it is widely dispersed, it becomes more vulnerable to interception by unauthorized parties

56

and to accidental breach.

57

The movement of data also increases the potential for it to be stolen by unauthorized third parties while it is in transit, particularly when it travels over a wireless network

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—or through communications components that may be incompatible with one another or possess outdated security protections.

5

Smart Meters and the Fourth Amendment

The use of smart meters presents the recurring conflict between law enforcement's need to effectively investigate and combat crime and our desire for privacy while in our homes. With smart meters, police will have access to data that might be used to track residents' daily lives and routines while in their homes, including their eating, sleeping, and showering habits, what appliances they use and when, and whether they prefer the television to the treadmill, among a host of other details.

60

Though a potential boon to police, access to this data is not limitless. The Fourth Amendment, which establishes the constitutional parameters for government investigations, may restrict access to smart meter data or establish rules by which it can be obtained.

61

The Fourth Amendment ensures that the "right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be

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Shari Feist Albrecht, Chair
Jay Scott Emler, Commissioner
Pat Apple, Commissioner

Sam Brownback, Governor

**MEMORANDUM
LEGAL DIVISION**

TO: Chair Shari Feist Albrecht
Commissioner Jay Scott Emler
Commissioner Pat Apple

FROM: Samuel Feather, Litigation Counsel

DATE: September 9, 2015

SUBJECT: 16-WSEE-066-COM

In the Matter of the Complaint Against Westar Energy by Steven N. and Mary Kay Ricke

EXECUTIVE SUMMARY:

Steven and Mary Kay Ricke (Complainant) filed a Formal Complaint¹ on August 7, 2015. On August 13, 2015, the Complainant filed an Amended Formal Complaint.² Legal Staff recommends the Commission accept the Amended Complaint as it relates to the Complainant's health and safety argument and forward the Complaint to Westar. Furthermore, Legal Staff notes that the Commission currently has an open investigation regarding the health risks posed by smart meters and recommends the Commission join the Amended Complaint to its ongoing investigation.

BACKGROUND & ANALYSIS:

The Amended Complaint alleges that smart meters create a serious health risk due to EMF radiation. Upon the filing of a formal complaint, the Commission must determine "whether or not the allegations, if true, would establish a prime [sic] facie case for action by the commission and whether or not the formal complaint conforms to [the Commission's] regulations."³

K.A.R. 82-1-220(b) requires formal complaints to satisfy three procedural requirements:

- (1) Fully and completely advise each respondent and the commission as to the provisions of law or the regulations or orders of the commission that have been or are being violated by the acts or omissions complained of, or that will be violated by a continuance of acts or omissions;

¹ Complaint Against Westar Energy by Steven N. and Mary Kay Ricke, August 7, 2015 (Formal Complaint).

² Amended Formal Complaint Against Westar Energy by Steven N. and Mary Kay Ricke, August 13, 2015 (Amended Complaint).

³ K.A.R. 82-1-220(c).

- (2) set forth concisely and in plain language the facts claimed by the complainant to constitute the violations; and
- (3) state the relief sought by the complainant.

The Amended Complaint states, "We believe Westar is purposefully not informing or acknowledging the health, fire and safety issues of smart meters"⁴. The concise narrative and attached documentation provide notice to Westar and the Commission that the Complaint is alleging that Westar's installation of smart meters creates a risk to public safety and thus complies with procedural requirement (2).

The Amended Complaint requests that Westar 1) allow customers to opt out of having smart meters with no additional charges or loss of service, 2) adequately inform customers of the potential risks associated with smart meters. The Amended Complaint clearly states the relief sought and thus complies with procedural requirement (3).

The Amended Complaint does not expressly cite to any law, regulation, or order in support of its health and safety argument and thus does not comply with procedural requirement (1). However, the Commission has the discretion to waive its regulations for good cause if it is in the public interest to do so unless otherwise required by law.⁵ The detailed requirements of the Commission's regulation are more restrictive than that ordinarily required by law.⁶

The Commission has been given full power, authority and jurisdiction to supervise and control the electric public utilities doing business in Kansas.⁷ Furthermore, the Commission is granted authority over each electric public utility's equipment, manner of conduct, and management to protect public safety.⁸ Legal Staff believes that the Amended Complaint provides sufficient detail to notify Westar and the Commission that the Complainant is asking the Commission to exercise its authority to protect public safety from the alleged harm of EMF. The Commission's Technical Staff currently is investigating this issue in the consolidated Docket Nos. 15-KCPE-265-COM, 15-WSEE-211-COM, and 15-KCPE-474-COM.

The public interest is not served by dismissing the complaints of customers without legal representation for deficiencies of procedural requirements that are more stringent than

⁴ Amended Complaint p. 2.

⁵ K.A.R. 82-1-202.

⁶ See, K.S.A. 66-101e, (the specific language of the statute allows for a complaint based solely on an unreasonable practice, K.A.R. 82-1-220(b) places the additional burden of alleging a specific violation of law, tariff or order which is not required by statute and may place an undue burden on complainants not represented by legal counsel); See also, *Boydston v. Bd. of Regents for State of Kan.*, 242 Kan. 94, 99, 744 P.2d 806, 811 (1987) (as long as the opponent is apprised of the facts that entitle the plaintiff to relief, it is not necessary to spell out a legal theory of relief in the pleadings).

⁷ K.S.A. 66-101.

⁸ K.S.A. 66-101h.

that required by Kansas law.⁹ Thus the Amended Complaint substantially complies with the procedural requirements of K.A.R. 82-1-220 and the Commission should waive K.A.R. 82-1-220(b)(1) for good cause.

This memorandum makes no recommendation regarding the *validity or veracity* of the Complainant's claims.

RECOMMENDATION:

Legal Staff recommends the Commission find:

- The Amended Complainant substantially complies with the procedural requirements of K.A.R. 82-1-220;
- K.A.R. 82-1-220(b)(1) should be waived for good cause.
- The Amended Complaint establishes a *prima facie* case for Commission action;
- The Amended Complaint should be served upon Westar Energy;
- Staff should be directed to investigate this matter and submit a Report and Recommendation to the Commission;
- This docket should be consolidated with Docket Nos. 15-KCPE-265-COM, 15-WSEE-211-COM, and 15-KCPE-474-COM.¹⁰

⁹ K.S.A. 66-155 obligates Legal Staff with the duty to prosecute suits on behalf of parties complaining of unjust discriminations by a public utility or other violations of the public utility act. Legal Staff believes full representation of the Complainant in this case would be an unnecessary use of Commission resources and is evidence of further good cause for the Commission to waive K.A.R. 82-1-220(b)(1).

¹⁰ K.A.R. 82-1-224.

PLEASE FORWARD THE ATTACHED DOCUMENT (S) ISSUED IN THE ABOVE-REFERENCED DOCKET
TO THE FOLLOWING:

NAME AND ADDRESS	NO. CERT. COPIES	NO. PLAIN COPIES
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ORDER MAILED **SEP 18 2015**

The Docket Room hereby certified that on this ____ day of _____, 20____, it caused a true and correct copy of the attached ORDER to be deposited in the United States Mail, postage prepaid, and addressed to the above persons.

IN RE: DOCKET NO. **15-WSEE-211-COM**

DATE **SEP 17 2015**

PLEASE FORWARD THE ATTACHED DOCUMENT (S) ISSUED IN THE ABOVE-REFERENCED DOCKET
TO THE FOLLOWING:

NAME AND ADDRESS	NO. CERT. COPIES	NO. PLAIN COPIES
JEFFREY L. MARTIN, VICE PRESIDENT, REGULATORY AFFAIRS WESTAR ENERGY, INC. 818 S KANSAS AVE PO BOX 889 TOPEKA, KS 66601-0889		

ORDER MAILED **SEP 18 2015**

The Docket Room hereby certified that on this _____ day of _____, 20_____, it caused a true and correct copy of the attached ORDER to be deposited in the United States Mail, postage prepaid, and addressed to the above persons.