

February 8, 2018

VIA E-FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utilities Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor
Harrisburg, PA 17120

RE: Eugene J. Bazan v. West Penn Power Company Docket No. C-2017-2640338,
Reply to West Penn Power's **Answer and New Matter**

Dear Secretary Chiavetta:

I received on January 22, 2018 an envelope from First Energy containing two documents: West Penn Power's Preliminary Objections, and Answer and New Matter of West Penn Power (WPP). As with its Preliminary Objections, WPP pretends it had no hand in formulating the regulations under which it operates, and hides behind its plan, PUC's jurisdiction, and Act 129. Act 129 §2807 (f) (2) (i) limits the furnishing of smart meter technology by electric distribution companies (EDC's) "Upon request from a customer that agrees to pay the cost of the smart meter at the time of the request."

The linguistic structure of this section is this: "Seller X shall provide item Y to customer Z only if the customer wants it and pays for it." This accords with the language and practice of an ordinary business transaction. Ironic as it seems, WPP appears not to understand, let alone accept, the language of ordinary commercial activity.

My wife and I did not request a smart meter, and did not pay for one at the time of the (not) request, as we did not want one. Despite our simple assertion consonant

with the law, WPP persists in building an edifice of language and cases to obscure this simple point of law.

Going through WPP's document, I find nothing in points 1-10 to which I enter objections except for the following:

Point 4: "The Company specifically avers that at all times relevant to this proceeding, the company's actions have been reasonable and performed in accordance with all applicable laws... and the Pennsylvania Utility Code...." While I agree that the Company believes it is compliant with the laws and codes, I disagree that they actually are as will be elucidated below. I have insufficient knowledge to judge the remaining parts of this sentence.

Responses to New Matter

Points 11-12 in New Matter are legal formalities and require no response. In point 13, WPP again asserts that its deploying smart meters is in compliance with Act 129, but as we have stated before, such deployment is not in accordance with Act 129. That WPP has a plan, as it states in point 14, to install meters is of no moment, as the plan itself is based on WPP's misconstruing Act 129 §2807 (f) (2). Below I present material to clarify these points and describe wherein lies the problem.

Response to Points 13 & 14

Since WPP appears to be having difficulty interpreting Act 129 §2807 (f) (2), an analogy may help: The Red Cross goes to Puerto Rico six months after the hurricane with cartons of clothing it is mandated to distribute, for which, if it does, it gets financially remunerated by the Federal government under its emergency management act. The act functions as an "opt-in" for clothing: that is, people have to want it to get it.

Of course, six months after the hurricane, the people in Puerto Rico have already secured clothing and are not in dire need for more, but the Red Cross still needs to get rid of this clothing if it is to be remunerated. Most of this new batch of donated clothing came from overstocks of clothing manufacturers who will get tax write-offs for their donations, which happens to consist of designer clothing. Red Cross administrators, anticipating this circumstance, wrote a provision in the contract allowing it to make a little money by charging for clothing if those not in need request it. The provision was written in this way:

The Red Cross shall furnish designer clothing as follows:

- (i) Upon request from a customer that agrees to pay the cost of the clothing at the time of the request.*
- (ii) For new and expectant mothers.*
- (iii) In accordance with a depreciation schedule not to exceed 15 months.*

Under (i) the Red Cross is required to furnish – meaning provide or give out – designer clothing to those who want it and are willing to pay for it. Mandate (ii) recognizes that new and expectant mothers are going to need new clothing and therefore the Red Cross is mandated to furnish designer clothing to such mothers. However, we can see that this does not mean that the new and expectant mothers are required to accept and wear this clothing. They are recognized as a segment of the population in need, and hence are on the list to be furnished with designer clothing with no requirement to pay for it. Provision (ii) also doesn't state that new and expectant mothers are required to accept only the designer clothing the Red Cross can furnish, for the Red Cross already has other clothing which may better satisfy their requirements.

The provision (iii) indicates that the Red Cross has identified another needy segment of the population: those whose clothes are old or wearing out, and so they are

furnishing designer clothing to such individuals but with a 15 month time limit because the Red Cross cannot be doing this forever. The Red Cross is, in fact, counting on dispersing the designer clothing to those in the population whose clothing is wearing out and needs to be replaced. They may try to identify people wearing older or worn-out clothing and provide them with designer clothing, but those with old clothing are not required to accept only the new designer clothing being furnished by the Red Cross, even if the Red Cross is the only supplier of clothing at that time. Maybe these persons like and prefer their old clothing. Maybe they regard designer clothing as impractical, chintzy and prone to wear out too quickly. For whatever reason, the Red Cross can anticipate that some people whose clothing is wearing out will want replacement designer clothing, and if so, the Red Cross can furnish it, but they are only mandated to furnish it to such people within 15 months, after which the Red Cross is no longer obligated to furnish designer clothing to such individuals.

Provisions (i), (ii) and (iii) do not give the Red Cross the authority to tell people in Puerto Rico that there is “no opt-out” and that they are forced to wear *only* the Red Cross’ designer clothing. The three provisions merely qualify for the Red Cross the *target populations it is to furnish* with designer clothing, only one population of which -- provision (i) – is expected to pay for it upon their request for the clothing. By successfully dispersing designer clothing to these target populations, the Red Cross expects financial remuneration from the Federal government and therefore is under an imperative to meet this goal. The remuneration motive in no way gives license to the Red Cross to force designer clothing on people who do not want or need it, even if the government, anticipating a stampede of Puerto Ricans to get designer clothing, has

required the Red Cross to submit a plan regarding how the clothing will be effectively dispersed to the people.

Perhaps the difficulty in properly interpreting Act 129 §2807 (f) (2) is with the use of the word “furnish.” The American Heritage Dictionary (2000) states that furnish means “1. to equip with what is needed” and “2. Supply; give.” Thus, as is made clear by our analogy, the Red Cross is required to “equip with what is needed” or “supply or give” but that does not mean that it is mandated to force it on people against their will, regardless of their need or the depreciation schedule that the Red Cross may have. The Red Cross is *required to provide aid* to those in disaster areas. Key to this end is *furnishing clothing*. They already have an inventory of regular donated clothing that is typically furnished to the needy. In the above example, they have a new alternative to furnish -- *designer* clothing.

In the case of the smart meters, the Electric Distribution Companies are *required to provide electricity*. Key to this end is *furnishing a metering device*. They already have an inventory of analog meters that they typically furnish to those requiring them. Presently, they have a new alternative to furnish -- *smart* meters.

The EDCs may be mandated to “furnish” smart meters as a means for metering electricity to those who need a meter, just as the Red Cross is mandated to furnish designer clothing for those in need of clothing, but it does not state in any way that smart meters are the *ONLY* technology capable of metering the electricity, just as the Red Cross’ mandate does not state that their designer clothing is the *ONLY* clothing capable of meeting the clothing needs of the people. Nor does it state that smart meters are the *ONLY* technology capable of metering that power companies have on hand to

furnish to homes. It also clearly does *not* state that the customer is required to accept such a meter, particularly when the customer has an existing analog meter that is far more robust and accurate than the fragile and hazardous device called a “smart meter.” In this case, as with the Red Cross, the EDCs are “to equip with what is needed” or to “supply or give”, but that does not mean that all the customers want or need this new kind of meter when they have an existing meter and have no need, nor would they want or accept such a meter.

In the case of the Red Cross handing out designer clothing instead of the typical donated clothing, there is only a certain segment of the population that would flock to get it and many others would remain content with what they have, have no interest in it, or regard it as impractical and chintzy. The “designer” power meter may be attractive to the technophile who has not given much thought to the realities and shortcomings of this technology, but many others do not regard it as either desirable or necessary, and, in fact, have legitimate concerns about its hazards, insecurity and adverse impacts. Robust, time-tested, long-lived, non-hazardous analog meters meet the requirement of accurate metering and remain a valid metering option, regardless of the EDC’s smart meter mandate. The law is written to allow the technophiles to opt-in and does not require that everyone opt-in.

Furthermore, Act 129 Section 2807 (f) (2) does not say that EDCs shall NOT furnish analog meters. There does not appear to be a prohibition against using analog meters to meet metering requirements. At the time Act 129 was passed, the EDCs would have had an inventory of analog meters but would not have had an inventory of smart meters. Smart meters are not a new technology. If smart meters are such a good

thing, why were they not made available to customers earlier? Why did it require a government act to initiate this effort? It is my understanding that smart meters were not a cost-effective technology and that EDCs could not make smart meters available without financial assistance from some outside agency.

Act 129 is merely asking EDCs to stock up on smart meters to meet the expected demand of (i) those who want them and are willing to pay for them, (ii) in new construction (but does not state in ALL new construction) and (iii) to replace analog meters that are wearing out according to a depreciation schedule not to exceed 15 years (but does not say this for ALL such instances). If, within 15 years, customers with aging analog meters have still not elected to have a smart meter installed on their home, then ***provision (iii) relieves the obligation of the EDCs to make smart meters available after 15 years.*** The EDCs are thus charged with being able to meet the potential demand for smart meters in these three cases, which are *potential markets* for new smart meters *if* desired by the customer.

Further, the law does not say EDCs are being instructed to INSTALL smart meters in all three cases. They are to “furnish smart meters,” because smart meters are a new thing, but without explicit exclusion of also furnishing analog meters. The EDCs did not have to be ordered to furnish analog meters, because they were already stocked with and able to supply analog meters to customers. Thus, the way the law is written does not in any way imply that smart meters are the ONLY meters EDCs are furnish to satisfy metering requirements.

Thus, “shall furnish” does not mean “to force to accept” nor does it mean “to force to install”. Act 129, Section 2807 (f) (2) was written with ***a non-mandatory*** intent as the

senators who signed for it clarified and as The General Assembly documented in the Legislative Record, Senate Pages 2626-2631, October 8, 2008, which we also cited in our response to the WPP's Preliminary Objections.

- Senator Tomlinson states "It is not mandated, but it allows for... anyone who wants to purchase a smart meter which they feel will help them manage their electric load better."
- Senator Boscola states, "We also made sure that smart meters would not be mandated for every single ratepayer. Not only is that a smarter approach to smart meter deployment, but it will also save electric customers hundreds of millions of dollars paying for something that will not provide a real benefit in their own households."
- Senator Fumo states, "In addition, we did not mandate smart meters, but we made them optional."

These intents are further substantiated by House Journal Page 386-403, Feb. 11, 2008 and House Journal Page 430-432, Feb. 12, 2008. Is WPP denying the intent of the law as declared by the senators who signed it?

Examining the train of bills introduced prior to Act 129 being passed, there is a clear pattern that bills mandating that one hundred percent of customers were to receive smart meters were all vetoed, as well as one stipulating the replacement of existing meters on a schedule of full depreciation:

- House Bill 2200 PN 3218 , Regular Session 2007-2008, (20080H2200B3218, page 16): which stipulated "(ii) Electric distribution companies shall furnish smart meter technology to: (C) One hundred percent of its customers within ten years after the effective date of this paragraph."
- House Bill 2200 PN 3233, (20080H2200B3233, page 16): which stipulated exactly the same.

- House Bill 2200 was amended, (20080H2200B4429, pages 37 and 38):
which stipulated in (iii) “IN ACCORDANCE WITH A SCHEDULE OF
REPLACEMENT OF FULL DEPRECIATION OF EXISTING METERS“

The intent of these early versions was very clear in that intent was for universal deployment of smart meters. However, this intent was vetoed. The public record (p. 395 of the House Journal, Feb 11, 2008), reveals the objections and concerns raised by state legislators, including statements by Representative Benninghoff as follows:

*... do we want a statewide mandate? Do we want the government telling you that you have to have a meter put in your property?
... there is no other State in the Commonwealth that has done this in the past, ...
...if this technology is so accurate and so helpful and such a cost reduction in savings for the consumer, why is it not being used unilaterally across this great nation?*

In Point 14 WPP refers to the 2014 approval of its Smart Meter Deployment Plan (SMP) by the Commission. With the above clarification of the definition of “furnish” and the intent with which Act 129 was passed, the SMPs are out of line with the law *if*, as asserted by WPP, these plans *require* that smart meters be installed on the home of *every* customer in the service area; consequently the Commission must take whatever actions are necessary to correct the SMP’s and the misguided directives to the EDCs, including directives over WPP.

The action which the Commission must now consider is revisiting its own implementation orders, on which EDCs including WPP hang onto as justifying their actions as being “**reasonable and performed in accordance with** all applicable laws, as well as the Company’s Commission-approved tariffs, the Pennsylvania Public Utility Code, **Commission regulations and orders.**” If the Commission erred in its interpretation of the law, erred further by not taking in the expressed sentiments of

House members, and erred consequently in the wording of its implementation orders to the EDCs, now is the time to acknowledge these errors, correct the orders, and provide WPP (and other EDCs), together with customers of these, with “such ... relief as is just and reasonable under the circumstances,” as WPP states in its final paragraph. On this last point, we are in full agreement: we all want relief.

On this line of reasoning we concur with the filing of “New Matter #2” in Michele and Francis Hriadil v. Duquesne Light Company (Docket No. C-2016-2571726)

[hereafter “Hriadil v. Duquesne”] point 8, excerpted here:

8. In Section 14, page 5, of Respondent’s Answer and New Matter, Respondent references the Smart Meter Procurement and Installation Implementation Order issued in June of 2009, which states

“The Commission **‘believes’** that it was the **‘intent’** of the General Assembly to require all covered EDCs to deploy smart meters system-wide when it included a requirement for smart meter deployment ‘in accordance with a depreciation schedule not to exceed 15 years.’”

(‘emphasis added’)

And, the Respondent references a subsequent **“decision”** by PUC Administrative Law Judge (ALJ) Hoyer in December 2013 that

"the use of the word **‘shall’** in the statute indicates the General Assembly’s direction that all customers **‘will’** receive a smart meter."

(‘emphasis added’)

Complainants (we) have presented incontrovertible Material Facts that

8.1. The **“belief”** of the Commission **as to the meaning of the wording** of Act **129**, stated at the time of its Implementation Order, **does NOT satisfy any rationale test of reasonableness.** In fact, it is so “off the mark” that it begs the question does the English language mean something different at the PA PUC than anywhere else? Because, to a reasonable man, it comes across as illogical and nothing other than an interpretive contrivance.

By focusing on the word “shall,” and transmuted “shall” to “will,” Judge Hoyer engages in a linguistic sleight of hand by hiding the more important word in the law -- “furnish”.

This excerpt indicates an additional place where the Commission has erred in its interpretation. Whether used in the context of “shall” or “will”, the operative verb is “furnish”, not “receive” and not “install.”

Response to Point 15

In point 15, WPP states:

No complaint on this subject was ever received by the Complainant prior to August 2017, even though the legislation that required the filing and implementation of the SMP was passed in 2008 and the company’s SMP was approved in 2014.

When Act 129 was passed in 2008, the energy conservation and renewable energy focus seemed like a positive step. By contrast, the plans to phase in smart meters occupied new and uncharted territory. We may liken this to the introduction of infant formula: what a great thing to save the wear and tear on women’s breasts while better nourishing their infants with “smart formula”! As subsequent decades bore out, infants fed the “smart formula” were deprived of taking in immune-boosting factors from their mother’s milk, thereby rendering them weaker and more susceptible to illnesses, allergies and other medical issues that could dog them for life.

Similarly, at its inception the smart meter sounded like a promising helpful technology. In the decade that has passed, much more has come to light about this technology. Examples abound but a few will suffice to demonstrate my point:

Example 1

In August 2012, the National Institute for Science, Law and Policy published its report “Getting Smarter About the Smart Grid” which dubbed “dumb” smart meters as

an unnecessary and inappropriate technology to use to meet the actual goals of a “smart grid” that is also sustainable. Lacking an Office of Technology Assessment (which conducted analyses in response to Congressional requests until its abolishment in 1995), such reports and analyses come, unfortunately, after the wheels of corporate motion have begun to move in a misguided direction. The report, well worth reading, lays out recommendations for a better path. However, the public does not usually read policy papers. Nor, we suspect, do power company officials ... unless mandated to. So, both the public and the companies proceed in ignorance as if “smart meters” were a good thing. (Report at: <http://www.gettingsmarteraboutthesmartgrid.org/>)

Example 2

In 2015, 5,000 customers in Stockton, CA lost power when their smart meters exploded from the power surge after a truck crashed into a utility pole. The article stated, “When the customers in more than 5000 homes will get their power back on will depend on how badly their meters are damaged.” (<http://sacramento.cbslocal.com/2015/03/30/stockton-smart-meters-explode-after-truck-causes-power-surge/>)

This breakdown would not have occurred had analog meters still been in operation. Power might have gone out, but the meters would not have been damaged. Not only did the power company have to restore power to the lines, but they had to replace or repair each individual meter of the residents affected. Does this sound smart to you?

Example 3

In September 2017, Fox13 news reported that in Lakeland, Florida more than a week after Hurricane Irma passed through, hundreds of residents were still without power. The article, titled “Smart meters could slow power restoration in Lakeland,” reported that

On Thursday, at least 300 homes were still without electricity. It is impossible to know an exact number because up to 500 of the so-called smart meters that were installed a few years ago are apparently malfunctioning. Clemmons says some of the smart meters are indicating that homes have power when they actually don't.

Source: <http://www.fox13news.com/news/local-news/smart-meters-could-slow-power-restoration-in-Lakeland>

Once again, we see that smart meters have not helped but have hindered the power company from accurately knowing which customers were experiencing an outage, and delayed restoration of power to customers. Is this scenario one WPP wants to face, particularly in light of increased storm severity in an era of climate change?

While these examples are more recent, even in 2014 when the company's SMP was approved, due diligence was not done by the company to survey serious shortcomings with the smart meters already installed in states like California. Some poor business decisions have been made – admittedly, out of ignorance initially. As with infant formula, we see evidence that our “smart” technology isn't as smart as we hoped or expected it to be. The time is ripe to throttle back, admit error, and back down on forcing the public to adopt a technology proven to be unreliable and hazardous, and requiring far more individual maintenance and attention than the analog meters.

Response to Point 16

In light of my responses to Points 13-15 in the discussion and examples above, I take issue with WPP's Point 16 that "Neither the Company's SMP nor Act 129 allow the Commission to grant the relief requested by the Complainant." As explained above, Act 129 §2807 (f) (2) calls for WPP to furnish smart meters to customers who request them and agree to pay for them; in new construction, and in accordance with a depreciation schedule not to exceed 15 years. The word "furnish" was used and "shall furnish" does not mean "shall install" nor does it mean "shall force to install". It merely asks that EDCs be suppliers of this technology and in no way prohibits the continuation of analog metering, nor does it prohibit the furnishing of analog meters to customers.

Thus, whether by request, new construction, or by virtue of the depreciation schedule, EDCs are mandated to furnish (provide or supply) smart meters, but they are not required to furnish ONLY smart meters, and they are not prohibited from furnishing analog meters that meet these same criteria. **If the SMP does not reflect the non-mandatory nature of Act 129, §2807 (f) (2) as clarified above and by the intent of the law specified in Senate Journal pages 2626-2631, then it is the sworn duty of the Commission to rectify this problem.**

Act 129 mandated all EDCs to submit a plan for the procurement and installation of smart meters "to install in accordance with paragraph (2)." Paragraph 2 does not mandate installation but only furnishing. This translates, in the business world as follows: You presently stock item X, but now you are also to stock new item Y. Item Y is not cost-effective for you to implement, but government assistance will help you make these available to the public. We expect Y to be highly desired by the public but it is a

new technology that is a little different from X, so we want you to come up with a plan for procuring enough Y to meet the expected demand for it, and for installing Y, since it involves physically going out all over the place to replace X with Y, which is, admittedly, expensive to do. To make Y, which is not a cost-effective technology as per earlier assessments, financially viable, the plan must include a financial analysis so we can figure out how to make Y available to the public in spite of financial hurdles.

That EDCs were required to submit a plan for procurement and installation of smart meters in accord with Act 129 §2807 (f) (2), does not translate to them being required to install them universally. Act 129 §2807 (f) (2) clearly states they are to *furnish* them... make them available to the public, thanks to some government financial support to get them launched. Act 129 §2807 (f) (2) identifies the potential customer base who might want a smart meter and does not discriminate against analog meters nor does it prohibit analog meters from meeting metering requirements.

A smart business analyst would have surveyed the market to better assess how many smart meters would be needed to meet the demand and would have stocked an appropriate amount. The procurement part of the plan would have limited the stocking up on smart meters according to the expected demand. The installation plan would have taken into account, based on the survey, how to install the meters to those requesting them – both in terms of how to physically swap out the meter at a location, and in terms of how to supply the new meters to each region of the service area to meet the anticipated demand. Both the procurement and installations plans would have had detailed financial analyses based on the anticipated demand. Was such a market survey done?

Unfortunately, the power companies told the public that smart meters were required by Pennsylvania law to be installed, and responded to objections with the position that there was no opt-out provision. Their plan was to hide behind their perversion of the law and replace all analog meters with smart meters, in complete violation of Act 129 §2807 (f)(2). The public trusted the Commission to pass SMPs which aligned with the law and the intent of the law, so the public was unaware of what was about to come down the pike, so to speak. The end result has caused a rift in the public's trust of power companies and the Public Utilities Commission. The law clearly contains a non-mandatory clause regarding the furnishing of smart meters and does not prohibit the continued use of analog meters. In addition, substantial on-going evidence of safety issues due to smart meters is in violation of Section 1501 of the Public Utility Code as will be addressed next. I regard it the duty of the Commission to realign the EDCs' SMPs with the proper intent and execution of Act 129, §2807 (f) (2).

Response to Point 17

WPP maintains that it “has not violated the Public Utility Code or the orders or regulation of the Commission.” Here, with regard to the Public Utility Code, in the case of *Hriadil v. Duquesne*, the complainants provide the following detail:

*Section 1501 of the Public Utility Code states the following:
§ 1501. Character of service and facilities. Every public utility shall furnish and maintain **adequate, efficient, safe, and reasonable service and facilities**, and shall make all such repairs, changes, alterations, substitutions, extensions, and improvements in or to such service and facilities as shall be necessary or proper **for the accommodation, convenience, and safety of its patrons, employees, and the public**, (emphasis added)*

As evidenced by the examples in my response to point 15 above, in addition to the information and examples on fire hazards cited in my response to the Preliminary

Objections, and in keeping with addition examples of fire hazards cited in complaints filed by others to the PUC, by forcing smart meters with known and documented hazards (to explode, malfunction and/or catch fire) on all customers, WPP is in violation of section 1501 of the Public Utility Code because smart meters are not providing customers with “adequate, efficient, safe, and reasonable service and facilities.” These hazards have been addressed and prior Commission rulings have set precedent in the following cases:

Norbert Sliwinski v Duquesne Light Company, C-2016-2559985,
Thomas and Margery McCarey vs PECO Energy Company, Docket No. C-2013-2354862
Laura Sunstein Murphy v PECO Energy Company, Docket No. C-2015-2475726.
Susan Kreider v. PECO Energy Company, Docket No. C-2015-2469655

Based on the arguments put forth by these complainants, WPP’s assertion that it “has not violated the Public Utility Code or the orders or regulation of the Commission,” must be rejected because

installation of smart meters is in conflict with Section 1501 of the Public Utility Code,
and
is a matter that is in the public interest. (Hriadil v. Duquesne)

I address the statements that “...the Company has not violated ... the orders or regulations of the Commission,” and that it is in compliance with “...the June 5 Order” in my response to Point 14 above. I reiterate that the action which the Commission must now consider is revisiting its own implementation orders, on which EDCs including WPP hang onto as justifying their actions, and taking appropriate corrective action.

Points 17 (remainder) and 18

The remainder of point 17 and point 18 indicate that WPP regards itself as compliant with Act 129 (point 17), and if barred from installing a smart meter at my

residence, would be in violation of Act 129 (point 18). I disagree with both and refer to my arguments in my responses to points 13-17 above. WPP's statements suggest that they have not read and understood Act 129 § 2807(f) (2). My complaint provides them with the opportunity to comply with the law for the greater common good and for the safety and well-being of my fellow Pennsylvanians.

My wife and I take seriously Act 129's mandate of energy conservation and move toward environmentally sustainable electric service. Since 1999 we have engaged in on-going retrofits of our 1938 home as follows:

- Re-insulated the exterior walls with high-performance foam within the wall cavities and additional foam board exterior to the stud face as a thermal break;
- Salvaged, refinished and re-used over 50% of the original cedar siding on the house during the retrofits;
- Improved insulation in all attic areas;
- Fabricated foam insulation shutters to use in winter over our windows during cold weather and at night;
- Re-furbished and installed four solar hot water heating panels on our roof to provide domestic hot water in summer and baseboard heating to a basement room during winter;
- Constructed and installed (from the best design we could find) two solar hot air collectors mounted vertically on the south-facing exterior wall to supplement heat in winter months;
- Replaced all windward windows in our home with high-performance triple pane "Serious" windows;

- Had two 300-ft deep wells drilled and had installed a ground source heat pump for year-round heating and cooling;
- Annually, grow 95% of our vegetables year-round and 80% of our fruit, organically, constituting 16% of our calories and 20% of our protein, thereby reducing our food footprint since it makes the most sense to grow water-weight crops in one's backyard rather than ship them from California (or Chile);
- Now purchase 100% of our power from wind energy suppliers.

We completed many of these retrofits prior to Act 129's passage in 2008. We have conducted careful analyses of our paybacks, and we give serious thought and consideration to new technologies that claim to further reduce our energy requirements and improve our overall energy efficiency. For example, photovoltaics for our location and conditions did not prove viable in our analysis. We are using less electrical energy now than we did prior to beginning retrofits, and that includes replacing our oil-burning furnace with a geothermal heat pump.

For a brief interval WPP around 2012 sent us analyses comparing our power bill to that of our neighbors, alerting us to the fact that ours was higher by comparison. We pointed out that these analyses were flawed, not considering that our neighbors were burning oil or natural gas for heating, or even wood in inefficient stoves that polluted the winter air. It is clear we have made the smarter choice, and furthermore are supporting the development of wind power generation with our choice of energy provider.

Qualifying professional backgrounds: My wife and I both have PhD's. My wife's expertise is in physics and materials science. She has worked as a physical

scientist at the National Institute of Standards and Technology in Gaithersburg, MD at the research (nuclear) reactor, and presently conducts research in the Microwave Processing and Engineering Center at Penn State under contract to industrial and government entities. She is thus experienced in radiation safety training and radiation hazards. Previously she directed Penn State's Center for Sustainability where she engaged students in hands-on projects in alternative building construction, alternative energy generation (passive and active solar, wind power), and ecological wastewater treatment using "Living Machine" technologies. She and I are not technophobes, but we insist on using proper metrics to assess ecological sustainability to be able to qualify methods, projects and devices.

My undergraduate degrees are in electrical engineering and economics, and my PhD is in City and Regional Planning. I have worked with public, private, educational, and non-profit organizations over the years on a variety of projects, and taught at two universities. I helped found the Center for Sustainability at Penn State. I appreciate the importance of careful analysis to assess the viability of a business or technology, as well as what is involved in implementation. I have designed and used heuristics to guide disparate parties toward agreement to cohere projects so these can move ahead in a fruitful manner. I am all for moving ahead if it makes sense to do so.

Smart meter assessment: Between the two of us, we feel able to assess such technologies as smart meters, and based upon our investigation, conclude these are not a technology we would choose to adopt to reduce further our energy consumption, nor in developing a "smart grid". The micro-incisive "control" of one's power use

claimed to be a benefit of smart meters can be easily achieved using a simple Watt-meter to assess the power draw of home appliances and make the decisions necessary to reduce household energy expenditure. For those technophiles who choose to use wireless technologies to remotely control or monitor devices in their home, such options exist without recourse to smart meters. Thus there are already ample technologies available for customers to better control their power usage in their home; the smart meter is an unnecessary device in this capacity. As our own experience has borne out, the power company has demonstrated the capacity to alert customers whose power usage appears to be excessive compared to that of their neighbors. Back in 2012 when we were contacted about our power usage, there were no smart meters in our area, so the power company is able to perform such assessments without smart meter technology.

Beyond operational energy draw, there are other tools to round out an assessment of a method or technology. We mention two: complete life cycle analysis and Ecological Footprint Analysis. Compare, for example the “energy hog” refrigerator that lasted 40 years with the Energy Star model that requires replacement in a much shorter period of time. There are energy costs in manufacturing, distribution, delivery, and subsequent recycling that have to be accounted for. An incandescent bulb turned on-off intermittently but lasting 20 years beats out the compact fluorescents that do not hold up well to intermittent on-offs and last maybe three years, plus can explode (and we have had that happen), releasing toxic mercury vapors into the home. When the shortcomings of compact fluorescents became apparent to us, we quickly moved to LED lights where appropriate, despite the high initial costs as they emerged on the

market. ***Smart meters are the compact fluorescents of the electric utility world – an interim technology.*** In this case, we do not yet see a viable alternative to the more reliable and robust, time-tested analog meters.

Limiting exposure: Just as my wife and I would not choose a smart meter for our home, we similarly intentionally limit our exposure to non-ionizing radiation in our home. We do not have or use a microwave oven; we use Ethernet cables and USB-wired accessories with our computers, and we have a corded landline. My wife has a Tracfone for emergency purposes which has accrued thousands of unused minutes since a certain number of minutes come with service renewal cards and she uses the phone so infrequently. My wife has to work in a laboratory with Wi-Fi and elects to come home to a place that is free of such radiation, and we both would like to keep our home environment free of such radiation.

The PUC's online brochure about smart meters (http://www.puc.state.pa.us/General/consumer_ed/pdf/13_Smart%20Meters.pdf) trivializes the amount of radiation from smart meters by averaging it over 30 minutes in comparison to other common devices in homes (ones which we intentionally do not use). Such presentation of the miniscule amount of radiation from a smart meter is akin to someone sticking a pin in your arm and saying "Don't worry. Averaged over 30 minutes it doesn't really hurt at all." In addition to the health and safety hazards I raised in my response to WPP's Preliminary Objections, I now also incorporate into my response additional health and safety concerns, evidence and material facts raised in New Matter #3 in Hriadil v. Duquesne which can be read here:

<http://www.puc.state.pa.us/pcdocs/1509518.pdf>

Regarding security: No matter what assurances WPP can provide that a wireless-transmission smart meter is secure from hacking, it means nothing in today's world. Former Director of the CIA, James Woolsey, warned against the insecurities inherent in the use of smart meters and "smart grid" back in 2011 (<https://www.youtube.com/watch?v=MAid1bS8t9U>). A 2017 interview with John McAfee, inventor of anti-virus software, reveals the fragility of the electric grid already: that at least a dozen countries possess the capability of wiping out the entire electric grid of another country via cyberattack. (Source: <https://www.youtube.com/watch?v=anrlpNYSgLA>).

My wife has been harassed online and despite assurances of security, her Obamacare account was hacked in 2016 resulting in the hackers obtaining her and my full personal information including social security numbers. Although she did not submit any of her Obamacare paperwork electronically, the Health Marketplace entered personal information into its computer system about us. This breach of security continues to cause us grief and effort to address. We do not do online banking and minimize online transactions to minimize our exposure to these insecurities. As an additional measure of security, I am not using her name in these documents since a simple Google search will allow hackers to then connect her with my PUC documents and potentially cause harm.

As examples of the widespread nature of security breaches, I refer to Exhibit 1 of "Response to Answers and New Matter" in Hriadil v. Duquesne. This is a 2-page article titled, "The 10 Biggest Data Breaches Of 2016 (So Far)" that provides further evidence

regarding security concerns. It may be read on pp. 45-46 here:

<http://www.puc.state.pa.us/pcdocs/1501506.pdf>

In short, my wife and I are in compliance with the larger vision of Act 129 and were so even before its passage. We elect to live in healthy ways and without the constant bombardment of non-ionizing radiation in our home. We do not wish to be unnecessarily burdened with a new fear of having our power meter hacked into, nor have to fear that our older house wiring will catch fire due to a smart meter (as I explained in my response to WPP's Preliminary Objections). While I am not expert in Constitutional law, it would seem that it should be our right to not be forced to use a technology which is inconsistent with safe and healthy principles of living. With respect to our rights and Constitutional law, I incorporate into my response the arguments and material facts presented in New Matter #4 in *Hriadil v. Duquesne* which can be read here: <http://www.puc.state.pa.us/pcdocs/1510231.pdf>

The only thing smart that I can see about "smart meters" is the label – a clever adjective to dupe the public into believing these are good when they are not, in the overall scheme of things.

To reiterate, I am not requesting a smart meter and do not give my consent to pay for it, in compliance with Act 129 § 2807(f) (2). As this passage mandates only that EDCs furnish smart meters, it does not preclude them from furnishing analog meters, and "furnish" does not mean "required to install" nor "force to install." If WPP's SMP does not properly reflect this truth and the intention with which Act 129 was passed, the Commission is obligated to take the necessary steps to bring it in line with the law. As our Public Utility Commission, you are in a position to undertake this enforcement, as

you are mandated to enforce the law as it is written and was intended. If this requires you to acknowledge the error of your implementation order and change this order, you are in a premier position to do so.

Finally, in point 8 of the Formal Complaint, the text states “You may represent yourself at the hearing.” I added this footnote to my Complaint: “During his phone call to me, BCS investigator Tim Clark mentioned the option of a hearing conducted by telephone, an option I may want to use.” If this matter comes to a hearing, I may want to use this option.

Sincerely,

A handwritten signature in black ink that reads "Eugene J. Bazan". The signature is written in a cursive style with a large initial 'E' and a long, sweeping tail on the 'n'.

Eugene J. Bazan