

ORIGINAL

OPEN MEETING AGENDA ITEM



0000146483

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RECEIVED

2013 JUL 12 A 11:00

July 11, 2013

Arizona Corporation Commission (ACC)  
Docket Control Center  
1200 West Washington Street  
Phoenix, Arizona 85007

AZ CORP COMMISSION  
DOCKET CONTROL

Arizona Corporation Commission  
DOCKET

JUL 12 2013

Re: Docket # E-00000C-11-0328



Commissioners,

APS's recent submission to the "smart" meter docket contains more of the same deception, lies and misinformation that have characterized APS on this subject for the last several years.

The studies APS has submitted are either funded by industry or by government "smart" meter promoting agencies or both. Some of these reports, such as the CCST, Tell Associates and Texas PUC reports have already been debunked by me. (here: <http://images.edocket.azcc.gov/docketpdf/0000146288.pdf>)

Interestingly, some of the reports APS submitted are the very same ones submitted recently by ACC staff. Maybe we should just turn the ACC keys over to APS and be done with it.

This letter will focus on the preposterous and pitifully inadequate Maine CDC report, which is so poorly done that one can only wonder at APS's grasp on reality for having included it in their submission.

Basically the report was put together and rushed through by people who had not even a superficial knowledge of "smart" meters – and that's putting it kindly.

Internal emails of the "Maine CDC Smart Meters Team", obtained via Maine's Freedom of Access Act, are quite revealing and very damaging. I have enclosed all the emails which were posted at the Maine Public Utilities Commission docket by the law firm of Taylor, McCormack & Frame. I have also selected some of the more salient email quotes for inclusion in this letter. There are such tid-bits as confused and conflicted Maine CDC director Dora Mills saying after the report went out that, "I never said "smart meters are safe" ...."

First however, I want to address something APS's lawyer wrote in the introduction to his submitted reports. He wrote:

“APS would remind the Commission that the Company has already provided expert testimony to the Commission in the form of a presentation made by Dr. Leeka Kheifets, a world-renowned epidemiologist from UCLA, at the Commission’s Workshop of September 8, 2011. The opponents of *AMI* [“smart” meters] have yet to provide any live witness on the subject, let alone an expert with credentials comparable to those of Dr. Kheifets.”

Oh right, and *I* would remind the Commission that, at the meeting he mentions, APS employees were treated as honored guests, pitched softball questions, given their own table and chairs at the front, their own individual microphones and as much time as they wanted to spew their propaganda and trot out their hired “scientist”, Kheifets, whose “presentation” was nothing more than a power-point rehash of the discredited CCST report, while the rest of us, “the opponents of *AMI*”, had to sit in the peanut gallery and use a communal mike at which we got a mere three minutes apiece. We were not given the opportunity to do a “presentation”.

*I do* agree with the APS lawyer that Leeka Kheifets is “world-renowned” – world-renowned as a fraud. Read “The Real Junk Science of EMFs: Stop Electric Field Cancer Research, Say Industry Scientists” (<http://microwavenews.com/junkscience.html>). Her work is described as “worse than junk science, it's fraud.”

The APS lawyer's crack about how “The opponents of *AMI* have yet to provide any live witness on the subject ...” is typical arrogance of the corporate rich who can afford to buy whomever they want. Give me a fraction of the money available to monopoly APS – and more than three minutes to present them – and I'll fly in several day's worth of “live witnesses”. But actually, the “opponents of *AMI*” had plenty of live and exceedingly expert witnesses at that meeting – the “smart” meter victims made sick from “smart” meter pulsed microwave bombardment.

On now to the Maine CDC report which starts by admitting:

“...the Maine CDC staff involved with this review have not spent their entire careers nor work fulltime in the topic area of health effects of RF radiation.”

When you read the Maine CDC staff's internal emails, that quote will be seen as an understatement at best. In short, Maine CDC staff were completely at sea on the “smart” meter issue. Their ineptitude is reflected throughout their report, and especially in their emails.

Another admission made in the Maine CDC report:

“ First, our review focused primarily on assessments and studies conducted by agencies we typically rely on for such work, such as government (U.S. and international governments) or government affiliated institutions.”

Governments that subsidize the “smart” grid (U.S. = \$3.4 Billion) are not impartial

sources. Such governments quite obviously have an agenda they are promoting and cannot be relied upon for truth or objectivity.

Because they were clueless about “smart” meters, the “Maine CDC Smart Meters Team” mostly chose cell phone studies on which to base their findings. While it should be obvious to anyone that using cell phone studies to base an opinion on the health effects of “smart” meters is an apples and oranges comparison, it was not obvious to the Maine CDC.

To clarify, cell phone use is voluntary. “Smart” meters are forced on people. Cell phone use is not 24/7/365. “Smart” meters broadcast almost constantly. Indeed, one of the cell phone studies cited by Maine CDC says “... exposure is also reduced by limiting the number and length of calls.” How do we limit the number and length of “smart” meter broadcasts? We do not have that option with “smart” meters. And cell phones broadcast radiation to the head. With “smart” meter radiation the whole body is exposed.

Making matters worse, the cell phone studies used by Maine CDC are woefully inadequate anyway.

Maine CDC relied heavily on the seriously flawed Interphone cell phone study and other studies which cite the Interphone study. By the way, the Interphone study was partially funded by the cell phone industry itself and various governments that the cell phone industry influences.

To get the happy results they wanted, Interphone “scientists” simply excluded many types of brain tumors. They also excluded people who had passed away, or were too sick to be interviewed as a result of their brain tumor. And they excluded children, who are more vulnerable to the effects of radiation. For a thorough debunking of the Interphone study read Dr. Joseph Mercola's “Red Alert: Insider Study on Cell Phone Safety Seriously Flawed...” (<http://articles.mercola.com/sites/articles/archive/2010/06/10/how-the-telecom-industry-deceives-you-about-brain-cancer-risk-and-cell-phones.aspx>)

Another bogus study in the Maine CDC report is the one done by the impressive sounding International Commission on Non-Ionizing Radiation Protection. From that report:

“Results of epidemiological studies to date give no consistent or convincing evidence of a causal relation between RF exposure and any adverse health effect. On the other hand, these studies have too many deficiencies to rule out an association.”

You've got to love that as a perfect example of equivocation. There is “no consistent or convincing evidence” but at the same time we can't rule it out. Thank goodness people have only two sides of their mouths otherwise they might have thrown in a third diametrically opposed conclusion.

In another example of equivocation, the Health Protection Agency of the United

Kingdom definitively states that “... there is no clear evidence of adverse health effects from the use of mobile phones or from phone masts.” Yet in the next paragraph they say, “Some of the published research has produced contradictory results, particularly biology experiments using cell cultures.”

This is science? APS should be embarrassed for wasting everyone's time with this garbage. Put another way, APS must think the ACC is stupid.

Maine CDC also used a WiFi study from the Health Protection Agency of the United Kingdom. One of its “Key Points” is that, “There is no consistent evidence to date that exposure to RF signals from Wi-Fi and WLANs adversely affect the health of the general population.” **Translation:** *There is in fact evidence.*

Trying to appear reasonable, cautious and having the public interest at heart, the Health Protection Agency then expresses the need “to keep the situation under ongoing review” as a “sensible precautionary approach”, and of course they call for more studies. **Translation:** *Let's just see what happens. We are conducting a live experiment on you.*

Maine CDC callously attempts to dismiss persons injured by RF with the following statement:

“The assessments further state that the majority of studies indicated that EHS individuals cannot detect EMF exposure any more accurately than non-EHS individuals, and that well controlled and conducted double-blind studies have shown that symptoms were not correlated with EMF exposure.”

That is total nonsense when you understand how those “majority of studies” are conducted. People were expected to react to an RF source like someone would to a light being turned on and off. “Can you feel it now?” “How about now?” While some people *can* react instantaneously to RF, many get sick and stay sick in a way comparable to hay fever. Just because the irritating pollen is removed does not mean they recover immediately.

Additionally, phrases such as “majority of studies” are a red flag, a warning that you are about to be misled. Industry has the money to pump out study after study. They have the influence to taint and corrupt government studies as well. Therefore, people doing real, independent research will of course be in the minority. The intent behind phrases such as “majority of studies” is to create doubt surrounding studies that are in the minority and to marginalize them. “Weighing the evidence” is a similar phrase designed to manipulate perception. Like “majority of studies”, it usually means adding up how many studies are on one side and how many are on the other.

You, as Commissioners entrusted with regulating the safety of public utilities, have to ask yourselves if you are prepared to dismiss Arizonans injured by RF as easily and callously as Maine CDC did, and if you are going to put others at risk of becoming injured.

As I have said in the past, these injured people are not psychosomatic hypochondriacs who heard about “smart” meter health issues and then decided that's what they had. The vast majority of them had no idea what a “smart” meter was or that they had one. It was often only after a long process of suffering and discovery, usually involving many costly visits to ignorant doctors, that some were fortunate enough to figure out what was causing their ailments and to take remedial action – like getting rid of their “smart” meter.

One of the most remarkable disconnects of the Maine CDC report is their inclusion of a FCC report allegedly entitled “Smart Meter FCC Letter” which is supposed to explain how:

“... multiple meters in the same geographical area can only communicate to a controller one at a time, therefore “eliminating the potential for exposure to multiple signals at the same time.””

There are several problems here. First of all the letter is called “Radio Frequency Safety” not “Smart Meter FCC Letter”. The real, actual name of the letter is not surprising since in its 21 pages “smart” meters are never mentioned!

One can only speculate as to why this FCC document was included by Maine CDC. Since the document says nothing *at all* about “smart” meters or how “smart” meters operate in a mesh network, Maine CDC has completely misrepresented the contents of this letter in their summary.

Perhaps Maine CDC's manifest dissonance can be understood by a review of their internal emails. In short, these people had no idea what they were doing.

Below is the email of Andy Smith, “Maine’s Toxicologist and the Director of Environmental and Occupational Health Programs”. Upon learning he will be tasked with a “smart” meter report, he basically admits ignorance, and his reluctance to get involved is obvious. Incidentally, in one of the emails Maine CDC director Dora Mills says that Andy is “... terrific, but honestly, this is not his issue.” If that's the case then why is he on the “Maine CDC Smart Meters Team”? Is it because having the “Toxicologist and Director of Environmental and Occupational Health Programs” lends authority to the report?

“Just a question. Why is it, whether wind power or smart meters or woodsmoke, regardless of whether we have the expertise, we get dragged into the middle. Are we sure we want to get dragged into these. To do so, appropriately remains staffing up with expertise in these areas and we already have a lot on our plates without chasing these type of issues. When is it better to say, “we don't know”, but would assume the lead agencies involved in the decisions to allow these would know (e.g., DEP, PUC, etc). If people want to give us resources to take these issues on, that's another matter.”

Likewise, Maine CDC director Dora Mills prefers that the issue just go away. This is not the kind of averse attitude I want in anyone entrusted with public health.

“I wish these issues wouldn't keep popping up – wind turbines, EMF, etc. Remember the good old days when it was just the tobacco companies?!?!”

In another email Dora Mills mentions that “smart” meters “... only emit radiation frequency about 10% of the time” and that “... smart meters are used at the most, 10% of the time.”

That is an incredible admission. It shows poor Dora has no understanding of the almost constant duty cycle of “smart” meters. Depending on its location in the network, a “smart” meter can broadcast from 10,000 to 190,000 times per day.

“Maine CDC Smart Meters Team” member Jay Hyland, director of the Maine Radiation Control Program, echoes this ridiculous “10% use factor” in some weak calculations he makes about people living next to a bank of meters. He has somewhat of a realization that this could be a problem for such people, but then couches his thoughts as just “playing devil's advocate”. He then brushes such people aside by concluding that, “Obviously people aren't home all day, and people aren't in bed all day....”

Hyland is amazingly shortsighted. Obviously some people are in fact home all day and, indeed, some people are bedridden. Also, the ones that are not will still be subject to smart meter radiation wherever they go in the “smart” meter network, including workplaces that may very well be next to not just one “smart” meter but large banks of meters. Hyland, a supposedly “educated” person in a position of authority, can't figure this out, even when “playing devil's advocate”? What a travesty!

It is also worth noting that director Dora Mills makes several complaints in different emails about Hyland being unavailable for most of the time the report was being compiled.

- **Mills:** “ And, Jay's reviews of the documents come in late and are extremely brief, leaving me to wonder if he really read through them. I'm not a career radiation expert, so for me to be writing extensively about this topic and to have it under such scrutiny from national and international experts is frightening.”
- **Mills:** “This is not an isolated issue - I've had several important requests for information and advice from Jay go unanswered the past 6 weeks....”
- **Mills:** “I still have not heard from him - are you sure he's working on this? It shouldn't have taken him too long. I wish I had known Jay was going to be too busy to deal with this very critical issue the last 6 weeks.”

The Maine CDC report's summary misleadingly states that:

“Dr. Mills has also been in contact with her colleagues from other states,

including New Mexico (since it is cited in the complaint filed with PUC), and has asked the Complainant for the names of any government health official who is concerned about health effects related to smart meter technologies.”

This creates the impression of thoroughness on the part of Mills and the report. Yet in the internal emails we find Mill's true assessment of the “colleague” in New Mexico:

“... he does NOT represent the NM Health Department. He works for the injury prevention program there (ie nothing to do with radiation), and works on this issue as a private person in his spare time. He seems to have more interest than expertise in this issue, at least from my communications with him.”

In one email, Andy Smith, the “Toxicologist” on the “Team”, sees the opposition to “smart” meters as “an orchestrated effort” – as if the combined government and utility efforts to “smart” meter the world are not “orchestrated”?! Poor Andy needs to refocus his paranoia.

The emails after the Maine CDC report was released show even more confusion, and a defensive agency in disarray.

- **Mills:** “Unfortunately, the headlines yesterday were a misquote. I never said “smart meters are safe” ....”
- **Mills:** “We did not issue a statement saying “smart meters are safe”.”

Hapless Hyland, the “radiation expert”, never did understand how “smart” meters worked, even after supposedly spending about six weeks on the case. Below is what he wrote after the Maine CDC report was released. Revealing his naivety, his email question is addressed to Central Maine Power – as if he would get a straight answer from them!

All he had to do was spend \$500 of his agency's money, buy an HF35C microwave analyzer, get up from his desk, go outside and do a little independent research by actually measuring the broadcasts of a few “smart” meters. He would have found that “smart” meters broadcast almost constantly, not just at night, and that the “regular time table like once per hour” is an industry promoted myth.

Hyland:

“We are still getting a number of calls per day on the smart meters, AMI, project. There is a fair amount of confusion regarding when the meters broadcast, and what the different pieces of the system are expected to do. My understanding is the meters broadcast on some regular time table like once per hour, unless the meters are acting as a repeater for other meters, in which case the first meter would broadcast 6 times per hour, or something of that nature. Could you please let us know what protocol the meters broadcast under? Answering the when, where, why of the broadcast parameters. Is the maximum broadcast

amount something like a tenth of a second every second? The statements we have been hearing and reading say things like “they will be operating for 41 minutes a day” and “they will do most of their communicating at night”. While we don't know specifically where this comes from it would be good to know what the protocol or specifications are, because they operate 10% of the time, could easily fall into either of the above statements.”

Can everyone agree that “protocol or specifications” would have been “good to know” before Maine CDC wrote and submitted their report? Wouldn't that have been a basic first step?

By the way, Maine Central Power replied by sending him their propaganda from Exponent. Exponent is a scientists-for-hire product liability defense firm.

In his book, *Doubt is Their Product: How Industry's Assault on Science Threatens Your Health*, author David Michaels exposes Exponent, and similar outfits like Gradient. Michaels explains:

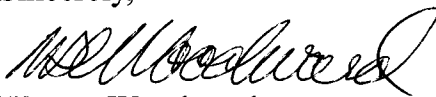
“They combine science with public relations to help clients avoid regulation and litigation. I have yet to see a study published by a product-defense firm that conflicts with the needs of the study's sponsors. The intent is to cast doubt on real science. The industry has deep roots in the fight over tobacco.”

Indeed, APS is currently using video clips of Gradient mercenary scientist Peter Valberg on their website and in their “smart” meter presentations. Valberg is literally a “tobacco scientist” having worked for Phillip Morris in the “light cigarettes” lawsuit.

This is the kind of pseudo-science APS is resorting to – poorly researched reports put together by incompetent bureaucrats such as the Maine CDC, and mercenaries like Kheifets and Valberg.

“Smart” meters are not safe and have not been proven safe. You have heard testimony from plenty of “smart” meter victims. Let's not have this “smart” meter issue play out worse than it already has. The time for a total safety recall is now.

Sincerely,



Warren Woodward

Cc: Governor Jan Brewer, Attorney General Tom Horne





TAYLOR  
McCORMACK &  
FRAME <sup>PC</sup>

ATTORNEYS AT LAW

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ATaylor@TMFAttorneys.com  
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**ELECTRONICALLY SUBMITTED ON DECEMBER 30, 2010**

December 30, 2010

Ms. Karen Geraghty  
Administrative Director  
Maine Public Utilities Commission  
18 State House Station  
Augusta, ME 04333-0018

Re: Elisa Boxer-Cook, et al.  
Request for Commission Investigation into  
Pursuing the Smart Meter Initiative  
Docket No. 2010-345

**THIS IS A VIRTUAL DUPLICATE OF THE ORIGINAL HARD COPY  
SUBMITTED TO THE COMMISSION IN ACCORDANCE WITH ITS  
ELECTRONIC FILING INSTRUCTIONS**

Dear Ms. Geraghty:

Complainants have recently received newly-discovered information from the CDC, as part of a Freedom of Access Act request, that further supports the need for the PUC to investigate and conduct hearings in this matter and fashion an opt-out option. We submit this newly-discovered information as a supplement to Complainants' response to CMP's request for dismissal. These documents would be used at hearing and during cross examination of CMP's witnesses. First, they point out that, contrary to CMP's assertions, Dora Mills specifically is not saying and refuses to say that smart meters are "safe."<sup>1</sup> She makes this point several times in her emails, yet this was not pointed out by CMP despite their interaction with the office of the CDC prior to the filing of their

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<sup>1</sup> Dr. Mills stated "I never said 'smart meters are safe.'"

response. This position supports Complainants' case for an opt-out option, and clearly supports affording a hearing to the Complainants where these issues can be explored. Additionally, the documents underscore an admitted lack of background, clarity and understanding by the CDC in its review of the health, safety, and privacy concerns regarding Smart Meters, as well as their discomfort addressing the issue. The internal documentation also underscores the concern at the CDC about information it received and reviewed on Smart Meters, and included statements that they did not look at all available information and made "assumptions, and in fact suggested that the parties seek expertise from unbiased experts."<sup>2</sup> Finally, the communications highlight CMP's efforts to guide the CDC in the issuance of its report (i.e., by providing the CDC with its own hired expert's reports from Exponent), and the CDC's expressed concerns about the objectivity of the "expert."<sup>3</sup>

Based on the prior submissions, the statutory and case law, and based on this newly-discovered evidence, we respectfully ask that the Commission reject CMP's attempts to terminate this matter without a hearing and to deprive Complainants of their ability to be heard and make their case for an opt-out option.

Regards,



Adam S. Taylor, Esq.  
Gregg R. Frame, Esq.  
Taylor, McCormack & Frame, LLC  
4 Milk Street, Suite 103  
Portland, Maine 04101

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<sup>2</sup> Indeed, Dr. Mills stated that she was "just presenting the 'other' side to what Elisa has presented." (Oct. 28, 2010 email) This simply creates a factual issue that cannot be resolved on a Motion to Dismiss, and indeed may not need to be resolved at all. In light of the uncertainty and public concern, an opt-out is a clearly prudent and reasonable way to resolve this matter.

<sup>3</sup> See November 5th email "He also named two firms that he would not use at this point due to reputations – though I do not know the details – Exponent and Gradient."

December 30

Page 3

Alan G. Stone, Esq.  
Skelton, Taintor & Abbott  
95 Main Street  
P.O. Box 3200  
Auburn, Maine 04212-3200

AST/ao

Attachments

cc: Service List

**Lovejoy, Elaine**

**From:** Hyland, Jay  
**Sent:** Sunday, November 21, 2010 2:35 PM  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS); Mills, Dora A.  
**Subject:** FW: Smart meters  
**Attachments:** 2010-11-16 Testimony of Kornberg 2010-345.pdf; 2010-11-16 Testimony of Exponent 2010-345.pdf; CMP AMI Reponse 2010-345.pdf

Heres the stuff from CMP

**From:** Carroll, John H. [mailto:John.Carroll@cmpco.com]  
**Sent:** Fri 11/19/2010 5:38 PM  
**To:** Hyland, Jay; Brown, Laney  
**Cc:** Brown, Laney  
**Subject:** RE: Smart meters

Jay,

This should be helpful. It's our testimony that we recently submitted to the PUC. The piece by Exponent should give you most of what you're looking for.

John C.

**From:** Hyland, Jay [mailto:Jay.Hyland@maine.gov]  
**Sent:** Friday, November 19, 2010 2:33 PM  
**To:** Brown, Laney; Carroll, John H.  
**Subject:** Smart meters

We are still getting a number of calls per day on the smart meters, AMI, project. There is a fair amount of confusion regarding when the meters broadcast, and what the different pieces of the system are expected to do. My understanding is the meters broadcast on some regular time table like once per hour, unless the meters are acting as a repeater for other meters, in which case the first meter would broadcast 6 times per hour, or something of that nature. Could you please let us know what protocol the meters broadcast under? Answering the when, where, why of the broadcast parameters. Is the maximum broadcast amount something like a tenth of a second every second? The statements we have been hearing and reading say things like "they will be operating for 41 minutes a day" and "they will do most of their communicating at night". While we don't know specifically where this comes from it would be good to know what the protocol or specifications are, because they operate 10% of the time, could easily fall into either of the above statements.

Additionally, there have been some statements made by the public that the "extenders" and "gateway" will be operating at 5.2 GHz. If you could just tell me what the different parts of the system are, and whether or not they would be operating using the same basic protocol of the smart meters that would be very helpful.

*Jay Hyland*

Radiation Control Program  
Division of Environmental Health  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services  
[www.maineradiationcontrol.org](http://www.maineradiationcontrol.org)

11/30/2010

**Lovejoy, Elaine**

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**From:** Mills, Dora A.  
**Sent:** Friday, October 15, 2010 9:33 AM  
**To:** Zukas-Lessard, Chris  
**Subject:** RE: smart meters

Thanks! Unfortunately, the headlines yesterday were a misquote. I never said, "smart meters are safe", and I've been emailing my exact points to opponents who have been sending upset emails. Dora

-----Original Message-----

**From:** Zukas-Lessard, Chris  
**Sent:** Friday, October 15, 2010 9:31 AM  
**To:** 'Mills, Dora A.'  
**Subject:** FW: smart meters

fyi

-----Original Message-----

**From:** Mary Ross [mailto:mary.ross1@myfairpoint.net]  
**Sent:** Friday, October 15, 2010 9:11 AM  
**To:** Zukas-Lessard, Chris; PUC, Maine  
**Subject:** smart meters

[http://emfsafetynetwork.org/?page\\_id=2292](http://emfsafetynetwork.org/?page_id=2292)

Good morning, Upon realizing that Maine was implementing smart meter technology and that Dora Mills deemed them safe, I thought perhaps you would review some of these testimonials. There are doctors statements included that are quite compelling. As a person who limits usage of computers, cell phones and microwaves and has replaced all cordless phones with corded ones, I am greatly disturbed by the prospect of having daily exposure imposed upon myself and my community. Not only do I object to having the technology affect my own home, I live in a very densely populated area and I am concerned about the technology in my surroundings. There are valid findings that raise concerns about smart meter technology. Please consider that this technology may impose adverse affects upon the health and well being of the citizens of Maine.

**Lovejoy, Elaine**

**From:** Smith, Andy E. (DHHS)  
**Sent:** Friday, November 12, 2010 2:12 PM  
**To:** Mills, Dora A.  
**Subject:** RE: Smart Meters Docket #2010-345

Some thoughts

- 1) I think we may want to stress (again) that our intent here was to provide the Office of the Public Advocate with a compendium of evaluations by other national and international health organizations. We make the assumption that these organizations with their larger resources have indeed evaluated all of the science. We are not experts on this, so are looking to people who we view as experts. I believe our position was that from a review of these agencies, we do not see evidence for ....
- 2) She mentions precautionary positions of several European countries on cell phones. If I remember correctly, during last year's legislation on warnings with cell phones, didn't we support an approach like England – brochure that discusses safety issues with cell phones such as known hazard from use when operating a vehicle as well as precautionary warning for young users and high end users and ways to reduce exposure?
- 3) Smart meters vs cell phone RF exposure. This is a critical issue and a Jay issue, but it would be great if could say concisely and clearly why it is that smart meters will represent far less exposure than cell phones. Remember, there is some evidence that long-term and high use of cell phones may result in an increased risk of brain cancer. But the risk, if real, appears small in magnitude and only with long-term and high RF exposure. If smart meters result in significantly lower RF exposure than cell phones (both because of power and distance), it follows that risk of brain cancer should be no more than typical cell phone users (for which there was no evidence of an increase in risk).

BTW – even EWG is not recommending that people stop using cell phones, just try to buy ones with lower power and follow tips to reduce exposure.

Andrew E. Smith, SM, ScD  
State Toxicologist  
Director, Environmental and Occupational Health Programs  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services  
11 State House Station  
Augusta, ME 04333  
Tel: (207) 287-5189  
Fax: (207) 287-3981

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**From:** Mills, Dora A.  
**Sent:** Thursday, November 11, 2010 5:36 PM  
**To:** Smith, Andy E. (DHHS)  
**Subject:** RE: Smart Meters Docket #2010-345

Yes yes yes!!! I've drafted a response, but will wait and edit it to make sure it's concise, since most of her issues are already addressed in the executive summary.

Some of the points I'd like to make much more concisely and more objectively are:

12/2/2010

Can't find any other state health dept that is willing to review this issue – I have been told by my peers there is insufficient evidence pointing to a problem to warrant spending time reviewing the issue, or to simply refer concerned people to the federal gov't.

We did not issue a statement saying "smart meters are safe". As with most any issue that one is trying to prove a negative health effect, there are always going to be uncertainties, and we state those uncertainties as well as the other caveats and limitations to our review in our executive summary. The statement about not having time to vet all the materials sent to us was used by me in preliminary press statements in October, when we were still reading and reviewing the many materials sent to us.

Because a full literature review of the topic would be an undertaking beyond the resources of this agency, we took an approach that we often do in such a situation – we reviewed the analyses and studies by gov't or gov't-affiliated organizations that do have the resources to conduct full literature reviews or conduct their own studies. With a number of emerging issues we rely on organizations such as the National Institutes of Health, the Institute of Medicine, the U.S. CDC, and even agencies from other countries and the World Health Organization.

We also used the studies on cell phones since they use the same RF as smart meters. Since cell phones use more power and are held closer to the body, it made sense to us that if studies do not show evidence of direct health concerns from their use, then there should be less concern about smart meters. Yes, there is some uncertainty in very long term studies, and we state those uncertainties in our summary.

The mesh issue is one that we refer to the FCC on. Their letter does not indicate that simultaneous emissions from all meters in a neighborhood occurs. Further questions on whether or not they exist I defer to the FCC.

Feel free to share any thoughts....Thanks!! Dora

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**From:** Smith, Andy E. (DHHS)  
**Sent:** Thursday, November 11, 2010 5:26 PM  
**To:** Mills, Dora A.  
**Subject:** Re: Smart Meters Docket #2010-345

....as forewarned....

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**From:** Mills, Dora A.  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Sent:** Thu Nov 11 12:17:44 2010  
**Subject:** FW: Smart Meters Docket #2010-345

One of several responses from the last day or so. I'm sure there will be more. Dora

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**From:** Suzanne Foley-Ferguson [mailto:PIusStrobus@maine.rr.com]  
**Sent:** Thursday, November 11, 2010 11:33 AM  
**To:** Mills, Dora A.  
**Cc:** Sara.Burns@cmpco.com; John.Carroll@cmpco.com; Richard.Daview@maine.gov; Harvey, Brenda  
**Subject:** Smart Meters Docket #2010-345

Docket# 2010-345

Dora Anne Mills, MD  
Maine Center for Disease Control and Prevention  
State Health Officer

12/2/2010

**Lovejoy, Elaine**

**From:** Mills, Dora A.  
**Sent:** Sunday, November 14, 2010 6:22 AM  
**To:** Zukas-Lessard, Chris  
**Subject:** RE: INFO NEEDED for SMART METER REPORT

I also emailed Jay late Friday with an urgent request and cc'd Nancy – an engineer from Texas Instruments has emailed the PUC saying that our assumption (that all of our arguments are based on) that radiofrequency of cell phones and smart meters are the same, is wrong. And, I sent two follow up emails. Have not heard anything.

Is he a senior program manager? Does he have a Blackberry? If the latter answer is "no", and especially if the former answer is "no", then I can understand that he doesn't check email over the weekend.

Regardless, it appears we've had very very little work from the Radiation Program on this issue. For example, we had a big meeting with call-in availability 2 ½ weeks ago with the Public Advocate and their lawyers. I had to repeatedly email Jay to make sure he could make it. I finally heard that he thought he could. He never showed up – on the phone or in person. Thankfully, Andy Smith did, and was terrific, but honestly, this is not his issue. And, Jay's reviews of the documents come in late and are extremely brief, leaving me to wonder if he really read through them. I'm not a career radiation expert, so for me to be writing extensively about this topic and to have it under such scrutiny from national and international experts is frightening. So, I rely on the experts of the internal team to make sure my writing is accurate, and Jay or his program staff are therefore very critical.

Dora

**From:** Zukas-Lessard, Chris  
**Sent:** Monday, November 08, 2010 7:27 AM  
**To:** Mills, Dora A.  
**Subject:** RE: INFO NEEDED for SMART METER REPORT

Very strange. I'll talk with Nancy at our next check in about this.

**From:** Mills, Dora A.  
**Sent:** Sunday, November 07, 2010 12:17 PM  
**To:** Zukas-Lessard, Chris  
**Subject:** FW: INFO NEEDED for SMART METER REPORT

This is not an isolated issue – I've had several important requests for information and advice from Jay go unanswered the past 6 weeks as well as last winter with the cell phone issue. I get the sense there is capacity in the program to assist with this issue, but for some reason a strong reluctance – based on years of coming up against the same wall and being told they're not overly busy there. Dora

**From:** Mills, Dora A.  
**Sent:** Sunday, November 07, 2010 12:10 PM  
**To:** Beardsley, Nancy  
**Cc:** Zukas-Lessard, Chris  
**Subject:** RE: INFO NEEDED for SMART METER REPORT

I still have not heard from him – are you sure he's working on this? It shouldn't have taken him too long. I wish I had known Jay was going to be too busy to deal with this very critical issue the last 6 weeks. There are other Radiation Program staff it seems like we could have used. Except for MY, it seems like this is one of the extremely rare occasions that the Radiation Program's expertise is in the spotlight. My predecessors and likely successors would have delegated the entire report to be written by the Radiation Program and Environmental

11/30/2010



**Lovejoy, Elaine**

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**From:** Smith, Andy E. (DHHS)  
**Sent:** Friday, November 05, 2010 2:05 PM  
**To:** 'Doug Thompson'  
**Subject:** RE: INTERPHONE paper

This is very helpful Doug, as it helps with how we frame our tone. After reading the Samet commentary, I wanted to be cautious to not over state negative evidence.

Andrew E. Smith, SM, ScD  
State Toxicologist  
Director, Environmental and Occupational Health Programs  
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**From:** Doug Thompson [mailto:DOUGT@usm.maine.edu]  
**Sent:** Friday, November 05, 2010 1:58 PM  
**To:** Smith, Andy E. (DHHS)  
**Subject:** INTERPHONE paper

Andy,

I have been through the full paper once. It seems to me that the authors are, like the two commentators, a bit too dismissive of the positive findings for gliomas in the highest exposure category and of the data on laterality. For example, I think that their statement in the abstract that "biases and error prevent a causal interpretation" is too strong. "Complicate" a causal interpretation, to be sure, or "add uncertainty," yes, but there is some evidence that supports a causal effect.

I would need to look also at the methodologic studies they on the reporting of laterality, etc., to evaluate whether I agree that the findings can be explained away in those terms.

Potentially, the laterality approach is the strongest in terms of causation, if the reporting can be trusted. Confounding is not a problem in such comparisons. More detailed localization within the brain and location-specific dosimetry will further capitalize on this approach, as the authors note.

Certainly, there is not yet compelling evidence for a substantial effect either in this study or in prior research. But I would not describe this study as completely negative. And, of course, there remains the major caveat that truly long-term studies will not be available for a while yet.

Will I be curtailing my cell phone use and/or relying more on hands-free than I now do? Not on the basis of what I have seen thus far.

Let me know how I can be of further help.

Doug

12/2/2010

**Lovejoy, Elaine**

**From:** Mills, Dora A.  
**Sent:** Sunday, November 14, 2010 6:06 AM  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Subject:** FW: CMP Smart Meters

Can't remember if I forwarded this email below onto you or not. Since there have been several of these, I think it may be most appropriate to write one email response and send it to all of them, with bullet points that cover the various issues they raise. Most of the emails raise the same 2 - 3 issues. And, although most of those issues are addressed in our original executive summary, I think it is worthwhile addressing them in a response - sometime this week. I'll try to pull some kind of draft together this week for all of us to review. Let me know if you have an alternative or additional idea.

Jay - I really really need the responses to the Texas Instrument email ASAP, especially since our major arguments depend on the RF of cell phones and smart meters being the same.

Thank you! Dora

**From:** Zukas-Lessard, Chris  
**Sent:** Saturday, November 13, 2010 3:11 PM  
**To:** Mills, Dora A.  
**Subject:** Fw: CMP Smart Meters

Fyi

**From:** Laura Landry [mailto:scolaucurmad@yahoo.com]  
**Sent:** Saturday, November 13, 2010 10:32 AM  
**To:** PUC, Maine  
**Cc:** joshuanoahhart@gmail.com <joshuanoahhart@gmail.com>; Zukas-Lessard, Chris  
**Subject:** CMP Smart Meters

To whom it may concern:

I am writing to request a halt to the installation of CMP smart meters in the town of Buxton, ME. Scarborough and Cape Elizabeth unanimously passed a resolution asking CMP to refrain from installing smart meters and related equipment for a minimum of 90 days. Scarborough has also requested that CMP participate in several public forums. In an article written for the "Sun Chronicle" dated, Wednesday, October 27, Scarborough Town Councilor Mike Wood stated the following.

"I want to be clear: this action does not mean the Town Council is taking a position on the use of smart meters at this time. However it specifically means that we want to be sure our citizens have the opportunity to ask questions and understand the implications of this issue before any effort is made to implement any plan to install them in our community."

Because CMP has opted to disregard the questions and fears of many, it is important that governments and regulatory agencies protect the interests of public health and safety for *all* communities. For these reasons, I am asking the Town of Buxton and the PUC to act in this regard. Like Scarborough, I am not asking the PUC or the Town of Buxton to take a position on the issue, but to allow enough time to address potential health and safety concerns.

Finally, I want to express my disappointment with several parties I feel have not done their duty to exercise proper diligence to protect the interests of Maine citizens. First, CMP for its failure to inform the public in a specific and transparent manner regarding the benefits and risks of the smart meters - especially considering the challenges to this technology in other parts of the country. Instead, CMP is plowing ahead with installations in the face of

11/30/2010

**Lovejoy, Elaine**

**From:** Smith, Andy E. (DHHS)  
**Sent:** Saturday, November 13, 2010 8:43 AM  
**To:** Mills, Dora A.; Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly  
**Subject:** RE: Response to Maine CDC Review of Smart Meters - Case Number 2010-345

Dora,

I hope the reviewer is incorrect that we are wrong about the frequency / power of CMP's smart meters relative to cell phones. The argument we advance is in part is that we (and others) do not see evidence of a risk of health effects (brain cancer) and RF radiation from cellphones except possibly among very long-term and high end users, and since smart meters will result in far lower RF exposure than cell phones due to power and proximity to the body, then risk from smart meters should be very low indeed. Obviously if CMP's smart meters have power much closer to that of cell phones, then we have to think much harder about actual exposure to make such a claim (proximity to body and use patterns).

The commentator is selective about his presentation of the epi studies, though perhaps he just wanted to make the point that there are positive studies out there. However, we cite that the major most comprehensive study to date has positive findings. The NCI fact sheet has a nice summary of the various epi studies, ...but it looks like you did not include this in your compilation (just the key points). Summary is below, you may want to include this with some of your letters as an addendum. - I highlighted the findings noted by the commentator. I was not aware of the Danish study that made use of cell phone billing records and the cancer registry data.

As for claims with documented sensitivity to RF, perhaps you should ask the commentator how he explains the findings of the double blind studies where they could not confirm sensitivity to RF among self described sensitive individuals? From what we read, groups that have looking into this issue do not discount the symptoms per se, just do not see the evidence to link them to RF.

I wonder if it might be useful to compile just the summary conclusions from the other health organizations (which I believe are all generally similar to ours, correct?) - perhaps as a 1-pager that can be attached to your response letters (i.e., yes there is uncertainty, but this is where all these organizations are coming down on this issue at this time). I know they are buried in the compilation, but you might consider summarizing them so you could present these to the commentators and ask them to explain on what evidence they believe we should reach a very different position than all these other organizations, and why they believe these agencies have not been responsive to such findings?

Note that the letters being sent and you are forwarding to us appear to have a general format (uncertainty, the material we reference discusses uncertainty, we are too definitive in statements given this uncertainty, precautionary action warranted) - just variations on major points emphasized. Note also similar addressees. So, I would assume this is an orchestrated effort.

I therefore wonder if we should meet again as a group and discuss what your time expectations are for this, as I can see this becoming a time sink, and do we know what PUC's / PA's expectations of us are if this issue comes before them (i.e., who is suppose to review all the information the petitioners would submit).

- AS

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<http://www.cancer.gov/cancertopics/factsheet/Risk/cellphones>

**6. What studies have been done, and what do they show?**

Numerous studies have investigated the relationship between cell phone use and the risk of developing malignant and benign brain tumors.

The most significant study of long-term use is the 13-country Interphone study, which is a multinational consortium of case-control studies. Interphone was coordinated by the International Agency for Research on Cancer (IARC) (3).

12/2/2010

Zealand, and the United States. The guidelines are very similar but just looking at the ANSI guideline which is the guideline adopted by the United States Federal Communications Commission and starting at 300 MHz the Maximum Permissible Exposure (MPE) for an uncontrolled environment is 0.2 mW/cm<sup>2</sup> which increases with increasing frequency to a guideline of 1.0 mW/cm<sup>2</sup> at 1500 MHz or 1.5 GHz. The fact that the guidelines all increase as frequency increases is due to the fact that lower frequency electromagnetic waves are more penetrating to the human body. The higher frequency waves from 1.5 GHz to 300 GHz are all limited to the same MPE 1.0 mW/cm<sup>2</sup>. This entire range of 298,500 Mhz is governed by one standard and since the numbers we compared were only 500 Mhz apart within that range we felt that the comparison was reasonable. The Maine CDC can't speak specifically for why CMP chose these meters but we expect it may be related to the fact that they broadcast at such a low power that they don't require a radio license from the FCC and they broadcast within the frequency ranges that FCC has specifically set aside for this type of use.

Mikel is correct that CMP is going to use the 5.8 GHz collectors or whatever they are calling them. I have specifically left this out of the response. I could fashion some reasoning for adding it in. The reasoning would be the same as the reasoning for the 2.4 Ghz reading, it just wouldn't sound as good. I could add that they will be farther away from people or something but I don't know that for sure....

I have stayed away from the SAR (specific absorption rate) numbers typically used in phones because the calculation is quite difficult, and if I make a number of assumptions about conductivity of tissue, and permittivity of tissue, and the density of tissue, it will most likely be torn apart by anyone who might wish to question our assumptions. The conductivity changes by as much as a factor of 10 depending on water content and tissue types so assumptions are not great. The field strength measurements are probably better because generally there is less to argue about, they are not frequency dependent, and I think the frequency dependent question is answered by the review of most of the worlds regulations that put the limits on exposure for phones and smart meters in the same category or with very similar limits. The other reason for not going with the Specific Absorption Rate is the difficulty in comparisons. The European Union allows a 10 gram tissue average and the US uses a 1 gram average, yet both set a SAR of watts per kilogram which tends to be confusing. They also allow averaging the signal over time which at least in the US is a 6 minute average. The effect of the time average and the tissue average is to level out the fields since they tend to be pulsed. They also decrease the SAR number dramatically.

The newer cell phones (digital) all broadcast in a pulsed mode (there has been a fair amount of discussion about the effect of pulsed signals) because the digital signal is sent out in "packets" that are put back together when they get where they are going. The packets are usually on the order of milliseconds long and separated by a dead space of about 8 times the pulse width (so they can cram 8 calls into one). There are a number of different exposure measurements out there. The best one is the volt/meter because it is easier to take. The U. S. appears to be focused on the power density measurement which is watts/square meter. This exposure measurement is challenging because they are meant to be a "far field" measurement. They are most accurate when the electric field flowing through the area in question (like a square meter) is uniform or homogenous. If you get too close to the source they tend to overestimate the actual measurement, but they appear to be the best thing I've got to do this comparison. The cell phone numbers tend to be all over the place, because the phones all have different SAR ratings by as much as a factor of 3. Additionally the mW/cm<sup>2</sup> reading could honestly be called misleading for the reasons above.

Source	Distance from source	Exposure (mW/cm <sup>2</sup> )	Frequency (MHz)	Broadcast power
Smart Meter	2 inches	0.99	2400	1
Smart Meter	6 inches	0.11	2400	1
Smart Meter	1 foot	0.028	2400	1
Smart Meter	3 feet	0.003	2400	1
bluetooth	2 cm	0.003	2442	0.1
cell phone	next to head	12	1910	1

*Jay Hyland*

Radiation Control Program  
Division of Environmental Health  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services

12/2/2010

**Lovejoy, Elaine**

**From:** Smith, Andy E. (DHHS)  
**Sent:** Thursday, November 04, 2010 10:57 AM  
**To:** Hyland, Jay; Mills, Dora A.; Ball, Lauren; Schwenn, Molly  
**Cc:** Beardsley, Nancy  
**Subject:** RE: Emailing: 55a.pdf

Hmmm, that seems to take away the ability to say we think smart meters would be a negligible risk by analogy to cell phones studies where the latest indicates if there is a risk it is with very high users only. Do you agree Jay? Others?

- Andy

Andrew E. Smith, SM, ScD  
State Toxicologist  
Director, Environmental and Occupational Health Programs  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services  
11 State House Station  
Augusta, ME 04333  
Tel: (207) 287-5189  
Fax: (207) 287-3981

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**From:** Hyland, Jay  
**Sent:** Thursday, November 04, 2010 10:11 AM  
**To:** Smith, Andy E. (DHHS); Mills, Dora A.; Ball, Lauren; Schwenn, Molly  
**Cc:** Beardsley, Nancy  
**Subject:** RE: Emailing: 55a.pdf

generally speaking the exposure to cell phones would be much higher, they have a higher output (3 times or thereabouts) and you hold them close to your body to use them. The time frame for use for smart meters is at a 10% use factor would be about 6 minutes per hour, say 24 hours per day for a total use per day of less than 2 hours 24 minutes which is close to 5 times higher than the interphone study. That said, there may be certain situations where the exposure from a smart meter could be similar, but they would be relatively rare. How about a person in a 10 unit apartment building with all 10 smart meters just outside the wall against which the head of their bed is located (10 units, 8 hours in bed, equals about 48 minutes of exposure, suppose all units are on at the same time). 10 units would cover a large area which eliminates the one over the distance squared decrease in radiation exposure to roughly 1 over the distance, so instead of decreasing by a factor of 16 (when you increase the distance by 4) you would decrease the exposure by a factor of 4 for large sources. I realize I'm playing devils advocate a bit here but this is just the type of question that we'll run into, because I read this very scenario on one of the "anti" websites. So all of that said the interphone study puts its high use category, as Andy said, at >1640 hours over a ten year period for cell phones which equates to about 30 minutes per day. Obviously people aren't home all day, and people aren't in bed all day, but the numbers are here primarily to show that if there is a concern for cell phones then maybe we need to look a lot harder at the smart meters because in certain circumstances it could be inferred that the exposures would be similar to the interphone study. Also by similar I would say that the cumulative daily exposure would be within a factor of ten depending on use and circumstance. Somebody is going to need to do some measurements.....

I hope this added perspective helps, certainly we can expect someone to do the math as it were....

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**From:** Smith, Andy E. (DHHS)

12/2/2010

**Sent:** Mon 11/1/2010 4:18 PM  
**To:** Mills, Dora A.; Ball, Lauren; Schwenn, Molly; Hyland, Jay  
**Cc:** Beardsley, Nancy  
**Subject:** FW: Emailing: 55a.pdf

See attached commentary forwarded to me by Dan Wartenberg. J. Samet is an old dean of epidemiology, perhaps best known of his work on linking air pollution with mortality data, but plenty else. I have read this commentary twice, and I think what they are leaning towards the possibility that there may very well be a link between high-end cell phone use (which is actually not all that high end) and brain cancer, one that seems consistent when you look across the various centers, take into account some of the potential biases, and consider the relatively short latency period to date. The authors of this commentary even state: "Those upholding a precautionary approach to the extent and manner of use of mobile phones may find some support in the elevated risks noted in subjects with the highest exposures."

This is definitely an article worth a very close read. Granted, the exposure from mobile phones is much higher than the smart meter exposures, correct Jay?

- Andy

Andrew E. Smith, SM, ScD  
State Toxicologist  
Director, Environmental and Occupational Health Programs  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services  
11 State House Station  
Augusta, ME 04333  
Tel: (207) 287-5189  
Fax: (207) 287-3981

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**From:** Daniel Wartenberg [mailto:dew@eohsi.rutgers.edu]  
**Sent:** Monday, November 01, 2010 3:05 PM  
**To:** Smith, Andy E. (DHHS)  
**Subject:** RE: Emailing: 55a.pdf

Andy,

Let me know if you want talk. I attach a commentary that discusses the results of the relatively recently released Interphone Study.

Dan Wartenberg  
Environmental and Occupational Health Sciences Institute  
UMDNJ--Robert Wood Johnson Medical School  
170 Frelinghuysen Road, Piscataway, NJ 08854  
phone 732-445-0197 fax 732-445-0784 email: dew@eohsi.rutgers.edu

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**From:** Smith, Andy E. (DHHS) [mailto:Andy.E.Smith@maine.gov]  
**Sent:** Friday, October 29, 2010 3:06 PM  
**To:** Daniel Wartenberg  
**Subject:** Re: Emailing: 55a.pdf

I am on the road for next 20 min - can I call you at 3:30 or you can call me on my cell 2075920205

12/2/2010

**Lovejoy, Elaine**

**From:** Mills, Dora A.  
**Sent:** Thursday, October 28, 2010 1:36 PM  
**To:** 'Lani Graham'  
**Subject:** RE: Smart Meter Information

I so agree – I wish these issues wouldn't keep popping up – wind turbines, EMF, etc. Remember the good old days when it was just the tobacco companies?!?!  

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**From:** Lani Graham [mailto:lgraham207@gmail.com]  
**Sent:** Thursday, October 28, 2010 1:28 PM  
**To:** Mills, Dora A.  
**Subject:** Re: Smart Meter Information

Thanks Dora, I am occasionally drawn in where angels fear to tread and this might be one of those times. I appreciate your warning. I am getting a little more cagey about making errors of judgement, but always can use a support system. I am now going to be particularly wary about this one. There are way too many of these issues. sigh. L.  
On Oct 28, 2010, at 1:20 PM, Mills, Dora A. wrote:

Lani – I really did not think you support smart meters, but I was just presenting the "other" side to what Elisa has presented, including the info about other health departments and the Commonwealth Club, etc, since I know on the surface it can be quite convincing, as I was at first. Dora  

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**From:** Lani Graham [mailto:lgraham207@gmail.com]  
**Sent:** Thursday, October 28, 2010 11:41 AM  
**To:** Mills, Dora A.  
**Cc:** Jessa Barnard; Gordon Smith; Norma Dreyfus  
**Subject:** Re: Smart Meter Information

Thanks Dora, That's good information.

I don't think the MMA or the PH committee should spend time researching this issue. I agree we are not equipped for that, and hence the issue does not warrant much of our time, and I think that should be made clear from the outset.

On the other hand, I really see no problem with airing the issue for informational purposes. I may be Little Red Riding Hood headed for the forest, but I love to hear what is going on. And you have shed a lot of light on it. I get the impression that somehow you think I am endorsing this issue. I'm not, but I am always intrigued by new issues. And again, I think this might be good for a conference on the importance of science in all areas. Lani  
On Oct 27, 2010, at 7:47 PM, Mills, Dora A. wrote:

Thank you, Lani.

I've asked Elisa for the name of ANY health official (of any state or local or other government) who is concerned

11/30/2010

about smart meters. She gave me the name of someone in New Mexico. I contacted him a few days ago. He was very clear that on this issue, he does NOT represent the NM Health Department. He works for the injury prevention program there (ie nothing to do with radiation), and works on this issue as a private person in his spare time. He seems to have more interest than expertise in this issue, at least from my communications with him.

As far as the Commonwealth Club Forum, I looked that up too. It is NOT one of their featured forums that they're so famous for. It's in a category of "membership-driven forums", which just about any one of their 13,000 members can put on. And, the speakers are mostly those who flew to Maine, mostly funded (as we were told anyway) by a San Francisco area realtor who has a brain tumor, to testify at the cell phone hearing this past March. One of them, the Berkeley professor, I spent quite a bit of time with discussing issues on the phone last winter, and Andy, Molly, and I disagreed completely with his interpretations of some studies.

Anyway, I know this issue looks very impressive on the surface, as it did to me earlier this year when confronted with the cell phone issue. But, it is a very complex topic and one in which there are many webs. And, if you review materials from numerous federal and other government materials (WHO, Health Canada, etc) and numerous legitimate academic researchers (including IOM, NAS, etc), you will find MANY assessments/evaluations/studies that do NOT support the theories that opponents to this are putting forth.

I do believe if the MMA is going to get into this topic of possible health effects of non-ionizing radiation (such as cell phones, smart meters, cordless phones, routers, baby monitors, radios, tvs, etc), the organization should be prepared to put forth a lot of resources to do it justice. It is a MUCH more complex issue than wind turbines, and from the very large showing at the cell phone hearing last winter (again many of the same people who are working on smart meters, and the issues overlap a great deal), and the apparent funding they have, expect to be bombarded.

Dora

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**From:** Lani Graham [<mailto:lgraham207@gmail.com>]  
**Sent:** Wednesday, October 27, 2010 7:01 PM  
**To:** Mills, Dora A.  
**Cc:** Jessa Barnard; Gordon Smith; Norma Dreyfus  
**Subject:** Re: Smart Meter Information

Thanks Dora, I'm glad to see you have looked at this. It's very helpful.

Actually I think there might be a State Health Department (maybe in the southwest) that has considered it. There will also be a Commonwealth Club Forum on the subject on 11/18. You might want to have someone from your shop listen in to it. I will forward the information if you don't know about it. By the way, one of the arguments I have heard, that I don't see addressed in your press points is that the concern has partly to do with the additive effect of many houses in the same neighborhood having these meters.

I have not reviewed any of the data and do not endorse it. In fact I asked that the Boxer material be forwarded "without endorsement". But I do think physicians should know that there is a fuss out there and I fully expected someone, perhaps you, would have an opinion on it. There are so many important issues that this isn't on my screen to spend much time on, and I thought the same might be true for you. I also mentioned that it might be good fodder for our idea of the need for science to drive decisions so I don't feel too bad about raising the issue.

Jessa, I think you should forward Dora's assessment to the committee as well if you are comfortable with that Dora and perhaps add that Norma and I do not have a position on this and it is for information only.

I certainly do not intend to be "held hostage" to this issue, and don't see any docs out there that want to

11/30/2010



do battle on the subject. On the other hand, I think physicians ought to know what is being discussed because many of them are likely to be asked. I think it is OK to say that we are looking at the information, but currently don't see a reason for concern. Despite what twisting may occur, I am also not afraid of recommending scientific research.

Thanks again for your helpful information. Lani

On Oct 27, 2010, at 5:58 PM, Mills, Dora A. wrote:

We have a team who are reading all of this material and much more that Elisa and others have sent us. This includes: me, Jay Hyland (radiation engineer), Molly Schwenn, MD (oncologist), Lauren Ball, DO, MPH (environmental epidemiologist), and Andy Smith (doctorate in toxicologist), and Nancy Beardsley. We have also discussed this issue with experts in academia, and I suspect PUC may bring in other experts as well. Although we are still reviewing materials and won't be making any public statements except for what we've already made (pasted in below), we so far see NO basis for concern. Many of the experts put forth by the opponents are the same as those wanting a cancer warning on cell phones and testified on such legislation earlier this year. Concerns about health effects of non-ionizing radiation have been expressed for decades, and so far the evidence just isn't there. The frequency and power of smart meters, as you can see from the table below, are in the range of cell phones, cordless phones, and routers, except that smart meters only emit radiation frequency about 10% of the time. There are no state health departments that I can find that are finding any concerns with these. Anyway, I just wanted to let you know what our preliminary thinking is. I don't mean by ANY means to dictate what the MMA says or does, but just felt you'd likely want to know what direction we seem to be headed, as preliminary as it is. And, although things are still very preliminary, this may also be another wind turbine topic. I would hate to see the MMA be taken hostage again!! And, this topic is even more complicated, needing people with expertise in radiation, pathophysiology, oncology, epidemiology, toxicology, etc. Dora

**Press Points:**

1. We received information from opponents of smart meters about 10 days ago. We received information from CMP last week. We're reviewing both sets of information as well as reviewing some peer-reviewed literature on the matter. We have not had a time yet to fully vet these materials, especially since there is quite a bit of material.
2. However, thus far, it appears from the information we have collected and vetted that smart meters emit non-ionizing radiation, and not the kind like you find in X-Rays (which over-exposure from can change the structure and function of cells).
3. It also appears that smart meters emit (non-ionizing) radiation that has a similar frequency and power as that of wireless routers, which many homes now have. And, that smart meters are used at the most, 10% of the time. So, smart meters appear to be similar to having a wireless router on the side of your house that operates about 10% of the time. The frequencies and power of smart meters are also in the range of those found in cordless phones and cell phones. There does not seem to be an analogy to having a cell phone tower on the side of one's house, as is reported by some of the emails we've received.
3. Some of the same arguments we heard last winter in relation to cell phone use are similar to what we've seen presented with smart meters.
4. Although we are commenting on possible health issues related to smart meters, this does not mean we are weighing in on whether or not people should have a choice in having them on their homes.

**Lovejoy, Elaine**

**From:** Mills, Dora A.  
**Sent:** Friday, October 29, 2010 2:16 PM  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Cc:** Mills, Dora A.  
**Subject:** Smart Meters

So, Andy and I discussed issues with the Public Advocate and one of their lawyers this morning.

Our plans moving forward are:

They suggest we submit a report of our findings sometime in the next 7 – 10 days, so I'm thinking 11/8. The report will have three main sections:

1. summaries of government agency findings (US federal gov't, other governments' agencies, WHO, etc);
2. a summary paragraph or two from us, basically saying that in our scan of the literature we do not find anything that is significantly different from the statements made by government agencies, but that there is some uncertainty, especially since our careers are not totally focused on this issue; and
3. a recommendation that they seek some expertise from unbiased experts in the following fields:  
pathophysiology – the effects of RF on cells; dose response kinds of issues; and epidemiology of related issues.

We also need to state in #2 above or in a preliminary section that some of the concerns stated in the complaint are not in our area at all, such as security and some safety issues.

I am rescheduling things so that I can focus on writing a draft of the first section to have for you to review on Wednesday. Meanwhile, if you know of such websites, please email them to me. I will try to draft a rough draft of the 2<sup>nd</sup> and 3<sup>rd</sup> sections in the next few days, especially so that we'll have more time to review them and make sure there is 100% consensus among us on those statements and recommendations (figuring editing of these sections, though they are likely to be much briefer than the first section, may also be much more challenging).

Feel free to make suggestions to these plans. And, please make suggestions to the areas of expertise we would like to recommend they seek. I do not think we need to state names of such experts (though they're fine if we do), but I think we should encourage them to ask us, and we should have some in mind. So, if you can also name any experts you feel would be good to accompany the area of expertise – especially people from academia, government, etc.

Thank you so much! Dora

11/30/2010

**Lovejoy, Elaine**

**From:** Mills, Dora A.  
**Sent:** Friday, October 29, 2010 5:06 PM  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Subject:** RE: Question on private firms

Great feedback – thank you to Lauren and Molly. Dora

**From:** Ball, Lauren  
**Sent:** Friday, October 29, 2010 4:32 PM  
**To:** Mills, Dora A.; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Subject:** RE: Question on private firms

I briefly visited their website.

There is no question that a private consulting firm can pull together a team of experts, and provide a review of the literature for their client for a fee - \$\$\$. The key to getting what you need done is in your contractual agreement. The concern that I have is - who is the consulting firm - meaning - are the scientists on staff unbiased or are they beholden to certain opinions and active with other organizations outside of work? Who are their clients? At first glance I noticed that this firm's clients for their EMF consulting include power companies, but then I noticed they have other clients mentioned including research organizations and regulatory agencies.

My advice is to fully vet the firm you would consider to use to see that there are no potential conflicts of interest. If a firm only worked for utility companies I would worry that the product (report) could be down played because it could be perceived that we contracted with a firm that may be perceived to be biased on this topic. This perception could arise due to staff list, client list, or their existing work (that is do they tend to produce reports that lean towards a certain conclusion about EMF). I guess what I am saying is if we commission a consultant to produce a report, and the findings are disagreeable to some, they will look for ways to discredit the results that have nothing to do with science and more to do with influence and politics. Which brings us back full circle...it could certainly be done for a price - just need to make sure you hire an unbiased firm.

No easy answer!  
Lauren

**From:** Mills, Dora A.  
**Sent:** Friday, October 29, 2010 3:41 PM  
**To:** Ball, Lauren; Beardsley, Nancy; Hyland, Jay; Schwenn, Molly; Smith, Andy E. (DHHS)  
**Subject:** Question on private firms

What do you think of private firms doing assessments? On the health issues related to wind turbines, a group from Chicago called Exponent (<http://www.exponent.com/>) did a very thoughtful analysis of the research for the Wisconsin PUC. They seem to have a wide array of experts, and say they will put together a team of the needed experts to do an assessment. I'm sure there is a large expense involved, but unlike most universities, it seems like they can pull together the various experts onto one team. From their website, it sounds like they may have already done such an assessment on EMF, given that they mention work done for PUCs, utility companies, etc.

Any thoughts? Thanks, Dora

11/30/2010

**Lovejoy, Elaine**

**From:** Beardsley, Nancy  
**Sent:** Friday, November 05, 2010 11:57 AM  
**To:** Hyland, Jay  
**Subject:** RE: SMART METER Review

UGH. Jay - could you send me the message.

Nancy Beardsley, Director  
Division of Environmental Health  
Maine Center for Disease Control and Prevention  
Department of Health and Human Services  
Telephone: 207-287-5674  
email: [nancy.beardsley@maine.gov](mailto:nancy.beardsley@maine.gov)

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**From:** Hyland, Jay  
**Sent:** Friday, November 05, 2010 11:54 AM  
**To:** Ball, Lauren; Mills, Dora A.; 'mschwenn@gmail.com'; Smith, Andy E. (DHHS); Beardsley, Nancy  
**Cc:** Schwenn, Molly  
**Subject:** Re: SMART METER Review  
**Importance:** High

No delay. Presently on bb. I sent my reply this morning at 12:19 am. I did not include Nancy on that message. Everyone else was included. If you don't have that message please let me know, everyone, that is.

**From:** Ball, Lauren  
**To:** Mills, Dora A.; 'mschwenn@gmail.com' <[mschwenn@gmail.com](mailto:mschwenn@gmail.com)>; Smith, Andy E. (DHHS)  
**Cc:** Hyland, Jay; Schwenn, Molly  
**Sent:** Fri Nov 05 11:15:01 2010  
**Subject:** Re: SMART METER Review

Dora,

I just spoke with Phil. He is really not up on the smart meter issue and had heard of the Interphone study but does not know it that well. I gave him the brief synopsis of what the smart meters are and he said - oh RF's like our blackberries use!

Devra Davis is no longer associated with Mt. Sinai. I can relate the rest of the story verbally. Prefer to not use e-mail. Let me know what number I can leave you a message on.

He also named two firms that he would not use at this point due to reputations - though I do not know the details - Exponent and Gradient

Hope this is helpful.

Lauren

11/30/2010

**Lovejoy, Elaine**

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**From:** Mills, Dora A.  
**Sent:** Sunday, October 03, 2010 7:59 AM  
**To:** Smith, Andy E. (DHHS)  
**Subject:** RE: Smart Meters

You're right, and I feel quite torn on this. I agree with all that you say. On the other hand, there is no other source of objective scientific information available in Maine. If we are "no shows" for some of these issues, you can imagine what might happen – we may have had a skull and crossbones on cell phones, scaring people. And, you can imagine how many other such bills Maine would attract from national groups realizing how easy it is to get legislation passed in this state. I think in the long run our best hope is that we get a full school of public health in Maine (USM or UNE), develop a close relationship with them, then set up a joint scientific advisory board like a NAS. I think in the meantime, it may be good for us to set up such an advisory committee on a case by case basis, but the problem is that these issues usually come up with little or no notice. Maybe since smart meters have now arisen and cell phone issues may continue, maybe we should consider a kind of radiation advisory committee to review these issues and help us? I can ask Jay. We used to have some kind of such committee related to Maine Yankee, which of course is a very different issue.

Thanks! Dora

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**From:** Smith, Andy E. (DHHS)  
**Sent:** Saturday, October 02, 2010 8:17 AM  
**To:** Mills, Dora A.  
**Subject:** RE: Smart Meters

Just a question. Why is it, whether wind power or smart meters or woodsmoke, regardless of whether we have the expertise, we get dragged into the middle. Are we sure we want to get dragged into these. To do so, appropriately remains staffing up with expertise in these areas and we already have a lot on our plates without chasing these type of issues. When is it better to say, "we don't know", but would assume the lead agencies involved in the decisions to allow these would know (e.g., DEP, PUC, etc). If people want to give us resources to take these issues on, that's another matter.

Just a question.

Andrew E. Smith, S.M., Sc.D.  
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**From:** Mills, Dora A.  
**Sent:** Friday, October 01, 2010 6:35 PM

11/30/2010