### **RESPONSES TO BCUC FIRE REPORT DRAFT**

## 1) Re. Provincial Fire Commissioner

(In response to statement that this office maintains a database to assist fire departments.)

Over the last 2 years I have requested over 100 fire and incident reports and have observed several problems with the reporting system in general and as it pertains to the smart meters specifically.

- There is no code for smart meters so there is no way for the Fire Commissioner to track fires associated with or caused by this device. Any fire that would be caused or exacerbated by a smart meter would be coded under "electrical distribution failure". Unfortunately the smart meters are flammable, unlike analogs that are made of metal and glass. Often the meters are so badly damaged/melted that no inspection is possible, and even in cases where the firemen strongly suspect or witnesses observed the fire starting at the smart meter, the ignition source must be reported as "undetermined". For example a fire in Coquitlam, Dec. 20, 2013.
- Fire reports are not put on the system as soon as they are received. A very high percentage of the reports I requested were put on the system only after I made my request, sometimes many months or even years after the report was completed by the local fire authority. As a result any statistics used in the annual report are incomplete and should not be used to draw any conclusions. For example, a fire in Coldstream March 13, 2013. The fire department report was dated April 9,. 2013. I submitted my request Nov. 11, 2014, and the report was put on the Fire Commission system Nov. 24, 2014.
- There is no annual counting of fires where the igniting object was "undetermined." 30-35% of the reports that I received fit into this category. Has this number changed over the years? There is no way to know.
- Regulations are not being enforced.
- According to the Fire Safety Standards Act,Sec. 36, nothing is to be removed from the scene of a fire. BC Hydro is removing meters and among the reports that I've received, this has happened 15 times or approximately 15% of the time. This seems to be a systemic issue, because I have received statements from both the Fire Commissioner's Office and BC Safety Authority that BC Hydro is allowed to remove smart meters before the fire inspectors are allowed to do their jobs because "it is their equipment."
- Fire inspectors have confirmed that smart meters are often removed when they arrive at the scene, and, as a result, even when evidence seems to indicate that the smart meter

was involved, they are, by law, required to indicate that that the igniting object was "undetermined."

This practice of utilities removing evidence is not limited to BC Hydro but rather seems to be a common one. Quebec firemen complained about this practice because, without the opportunity to investigate the smart meters, the true cause of fires may be escaping scrutiny.

http://www.cbc.ca/news/canada/montreal/quebec-city-firefighters-ask-hydrogu%C3%A9bec-to-leave-smart-meters-alone-1.2983309

- Under the Fire Standards Act Sec. 9 the local assistant is to inspect the fire scene within 3 days and immediately after the investigation submit a written report to the fire commissioner. This is not happening in many cases, and there is no way for the fire commissioner to know or to follow up when this isn't done. In the relatively few reports that I requested, there were many where the reports were not completed for several months, even years. In some cases the report wasn't completed until after my request. In 6 cases no reports were ever submitted, even after the Fire Commissioner's Office asked for them. An example is a fire that occurred in Langley on April 3, 2013. I submitted a request for the report on Sept. 21, 2014, and no report has been received as of this date.
- I was advised that only fires that cause "substantial" (undefined) damage must be reported to the Fire Commissioner. That means that fires that were caught early, and otherwise might have been serious, are not reported. In situations where smart meters overheated, melted or even caused minor fires they are not being reported to the Fire Commissioner or to BC Safety Authority. An example was a smart meter catching fire at the Sparwood Post Office on Aug. 1, 2012. This was caught before a fire department was called. BCSA was not informed for several days, so no report was made because no investigation was possible.
- Several fire chiefs with whom I spoke told me (in confidence) that, because of budget cuts and reduced staff, they were not to spend time trying to determine the cause of a fire. Ruling out arson or a grow op is their prime concern. If they don't have the time or resources to identify the cause of a fire, how can anyone say that smart meters are not involved?

### 2) Re. Local Fire Departments

(In response to statement that Fire Departments must follow regulations and involve BC Safety Authority if any electrical equipment is suspected to be involved.)

Through my search for information I have found several problems within the reporting system required of and followed by the Local Fire Departments.

• According to Fire Commissioner Anderson there are 2 reports that the local fire officials complete. First is the fire report that is submitted to the Fire Commission Office and which provides numbers for the annual report, as quoted from Mr. Anderson's email:

"In order to produce that report the LAFC will have investigated "in a general way" the fire and the information gained from that process is reflected in the codes of the report and sometimes is also reflected in the narrative portion.

The second type of report is a "fire investigation report". This type of report (note: one is <u>not</u> <u>always</u> compiled after an investigation) is done by the local authority and the information contained in such a report is retained by the local authority and <u>is not sent</u> to the OFC. "

Vital pieces of information that would provide evidence regarding causes of fires are not consistently documented, and when they are, the report does not reach the agency responsible for the safety of the BC public.

- The local fire departments in many instances are not completing and submitting the fire reports immediately after the fire. Of the reports I received with the report completion dates, 57% were completed more than one month after the fire, ranging between 2 months to more than 1 year after the fires. An example is a fire that occurred in Nelson on Jan. 22, 2013. The date on the report was April 1, 2014,
- The BC Safety Authority is not being notified in all cases where the fire officials believe the fire might have been caused by an electrical device or problem. I did not request BCSA reports for all fires identified as being "electrical", but of those I did, 13 had no BCSA report. An example is a fire on an exterior wall that occurred at Port Hardy on Feb. 11, 2013. The igniting object was "failed electrical distribution equipment." BCSA had no report on this incident.

# 3) BC Safety Authority

(In response to the statement that utility companies are exempt from having "their equipment" certified by CSA.)

I suspect that the exemption for utility owned equipment from the Electrical Safety Regulation made sense when that equipment was distant from homes, or was not flammable. Analogs were difficult to burn, if not impossible. They were tested in conjunction with the meter base which was certified by CSA, and they had a long history of being safe. Given the new technology, this exemption needs to be revisited. Smart meters are digital, flammable, and, in the opinion of experts, not satisfactorily tested for fire safety. untested, being put on to our homes without any oversight.

• I ask that the Electrical Safety Regulation be reviewed and updated to take into consideration this new technology.

- 4) (In response to the statement that the BCSA is not mandated with investigating fires associated with "utility owned meters" but are supposed to investigate fires associated with individual-owned meter bases.)
  - This is totally inconsistent. They cannot investigate smart meters yet they are supposed to investigate meter socket incidents that may have been caused by improper fitting meters. In other jurisdictions (e.g. Texas), many fires have been caused by ITRON Openway meters not fitting the base that previously held the analog. The experts said that the blades of the meter were thinner than those of the analogs leaving a gap which caused arcing and fires. Who is investigating this as a possible cause of fires in BC? I fear no one is.
  - BC Hydro often is the first on the scene when a meter fails, overheats, melts or burns. In many instances BC Hydro does not report the incident to BCSA. An example: Vancouver home Oct. 12, 2014, meter burned but the homeowner extinguished it. BC Hydro removed the meter and told the homeowner it would be inspected at their lab. No report was submitted to the Fire Commissioner because the fire department was not called. BCSA was not notified and has no report. Power Tech, BC Hydro's lab, said they had never received a smart meter to inspect.
  - Because BC Hydro is exempt from the BC Safety Standards Act, BCSA has limited authority
    over equipment owned by BC Hydro. If BCSA determines that the smart meters are a fire
    hazard they have no authority to act. Furthermore, according to BCSA it has limited
    authority over BC Hydro as well. Should there be a failure to report an incident as required
    by the Regulation, they have no authority to act. What agency is to determine that smart
    meters are safe or not? BCSA is a key agency with expertise to investigate electrical fires.
    If they are not advised and allowed to inspect the smart meter, or if they are allowed to
    inspect but not allowed to speak out when they see a problem with BC Hydro's smart
    meters, how can BCUC say that there have been no smart meter fires?
  - Is it accurate to say that because the smart meter is an unregulated product that should a smart meter cause a death that it would not be considered an "incident", and therefore BCSA would not be able to investigate?

# 5) Utilities

(In response to statement that Hydro is subject to the Fire Safety Standards Act and must not remove anything from a fire scene until the BC Safety Authority (BCSA) has done its job)

BC Hydro is exempt from most provisions of the Electrical Standards Act and the Electrical Safety Standards, but it is ignoring the provisions in the Electrical Safety Regulations that do apply to it – with impunity. Further, those who are to enforce the Act are condoning Hydro's disregard.

- BC Hydro is removing meters from the fire scene. A fire inspector and a fire chief told me (in confidence) that this is a regular occurrence. Both the Fire Commissioner and BCSA have said this removal prior to inspection is allowed because it is Hydro's equipment. How is this different from an arsonist being allowed to remove a gas can from the scene of the fire because it belongs to him? An example is a fire in Coquitlam, Aug, 5, 2012. The BCSA report states that cause of fire could not be determined because the meter had been removed before it could be examined. (copy was provided).
- BC Hydro is not informing BCSA when incidents occur. Repairs are done and BCSA has no opportunity to investigate. Example: Port Hardy, July 10, 2012, smart meter burned, fire extinguished without fire dept. arriving. Hydro attended, replaced smart meter. Trouble report stated "probable meter base. Mechanical, electrical failure/malfunction." No lab report available. BCSA was never informed.
- In some instances when a fire chief has confronted BC Hydro and asked about the meter being taken, BC Hydro has said it is taking the meter to its lab for investigation. Yet Power Tech, BC Hydro' lab, has never seen a smart meter. BC Hydro told me that they never inspect a failed or burned meter but rather immediately send it to ITRON for replacement under the warranty. Example: Vernon fire Aug. 13, 2013, appeared to be electrical. BC Hydro removed the meter and when asked by fire chief, he was told that the meter needed to be inspected at Hydro's lab. Power Tech had no report.
- Who is holding BC Hydro responsible for following regulations if BCUC has been told to not get involved with the smart meter program?
- 6) (In response to the statement that BCUC is mandated with ensuring the public's safety and had reviewed reports wherever available.)
  - What individual incident reports had BCUC reviewed in advance of this recent complaint to assess smart meter safety in BC?
  - As shown, provincial statistics are not credible. When did BCUC become aware that the provincial statistics are not credible?
- 7) (In response to statement that the Clean Energy Act (2010) and Direction 4 (2013) banned the BCUC from becoming involved in any aspect of the Smart Meter Program. Therefore even though BCUC has the duty under the Utilities Commission Act to protect the public, there is nothing it can do to interfere with BC Hydro's installation of smart meters or the program.)

- What, if any, penalty does BCUC suffer if it fails to take responsibility for public safety in regard to the smart meter?
- If BCUC has evidence that smart meters are not safe, that incidents have occurred that put lives and property at risk, what can BCUC do to protect the public as is its responsibility under the Utilities Commission Act?
- Who can prevent BC Hydro from forcing people to have fire hazards on their homes if both BCUC and the government refuse to take this action?
- 8) (In response to information re. certification by an independent body.)
  - The meter socket that currently is on homes was certified by CSA in conjunction with the analog meter. Never has it been certified to hold anything besides the analog, and certainly not a digital meter. There has been no independent certification of these meters except by Measurements Canada to ensure accuracy.
- 9) (In response to the statement that smart meters are certified by ANSI.)
  - The ITRON Openway meter used in BC is the very same meter that failed and burned "by the palette" in Texas according to legal testimony. It is logical to assume the same "common standards" were used there as in British Columbia. It seems, therefore, that the standards that are being used are inadequate for these meters.

According to CSA (<u>http://shop.csa.ca/en/canada/electrical-engineering-standards/can3-c17-m84-r2015/invt/27017261984</u>) "1.1.1 This Standard does not provide details pertaining to meter mounting devices."

- Did ITRON meters in Texas that burned and failed by the palette-load meet ANSI standards? We must assume they did since ITRON installed them, and still they failed demonstrating that UL and ANSI standards are inadequate.
- 10) (In response to the statement that smart meters are certified by Measurements Canada, implying MC certifies for safety.)
  - Measurement Canada, and any similar standards, test for accuracy only. The complaint lodged did not questioned ITRON's meters' accuracy. These standards do not test for safety.
- 11) (In response to statement that smart meters all meet the same ANSI standards which apply to all aspects including fitting into the meter base.)

Above it is stated these standards are "common" and would be considered basic for all smart meters, including those in Texas where they have failed and burned in large numbers.

- Who has confirmed that these standards are adequate to ensure safety?
- Why are BC Hydro and FortisBC refusing to have CSA or an independent professional electrical engineer licensed in BC certify these meters if they believe they are safe?

12) (In response to statement that UL had a new certification standard for smart meters.)

Of what significance is this to the meters already installed on homes? Shouldn't electrical devices that are put on homes have been certified before installation? Why does UL require a Canadian version of its meter standard 2735? Will independent testing confirm that this standard is adequate in all regards?

13) (In response to assertion that Len Garis's report confirmed that there have been no smart meter fires and therefore smart meters are safe.)

The fact that Mr. Garis depends solely on the database of the fire incidents maintained by the provincial Fire Commissioner's Office for his "research" is the basic problem with the report. As I will demonstrate, the database is incomplete. It is obvious that Mr. Garis should have investigated the validity of the data before using it in several reports to substantiate the safety of smart meters.

• Despite the requirement that local fire officials complete and file reports with the Fire Commission immediately after a fire, this is a demand that is largely ignored. Of the numerous <u>fire reports</u> I've requested, <u>nearly 50% were</u> <u>completed from 2-3 months up to 2-3 years after the fire occurred.</u> A couple of examples:

Langley fire on July 10, 2013. Dept. completed report July 11, 2014.

Cumberland fire on Aug. 8, 2013. Dept. completed report June 20, 2014.

• Because these reports and others were completed so long after the incident, some only after I requested them, it is inevitable that time and expediency will have had an influence on the interpretation of those results. Their accuracy, thus, is put into question.

- Mr. Garis depends upon the Fire Commission's statistics alone and has done no other research but, like the reports indicated above and for the same reason, they cannot be trusted. Data input to the system in too many instances occurs one year or longer after the event, often many months after the fire report was submitted by the local fire authorities. Of the reports I've gathered, approximately 70% have not been put on the system within 1-2 months of the report having been submitted. And many of those have not even been put on the system in time to be included in that year's annual report...which means that they don't get reported at all. Coupling this discrepancy with the legerdemain required when the Garis Report derives calendar year conclusions from July to July data shows not only that the Garis Report is of no value but it is actually a stumbling block for anyone seeking to gain an understanding of the true nature of fire incidents.
- Following the path of the two examples above, <u>the examples below would not</u> <u>have been included in the annual report for the year in which the fire</u> <u>occurred</u>.

Langley fire <u>on July 10, 2013</u>, dept. report completed July 11, 2014. Put on FC system <u>Dec. 15, 2014.</u>

Cumberland fire on <u>Aug. 8, 2013</u>, dept. report completed on June 20, 2014. Put on FC system <u>Oct. 3, 2014</u>

• <u>Some fire reports are never filed by the local fire authority</u>. even after the Fire Commissioner's office requested the report because I had filed an FOI. 2 examples are:

Vancouver fire on April 24, 2014.

Enderby fire on Feb. 6, 2013

Even a cursory reading of the Garis Report should give rise to the question: Why is this report given such credibility that it is often quoted as the proof that smart meters have not caused fires when there is little or no available data from which to draw conclusions and, therefore, that the conclusions drawn must be highly suspect?

 As stated above, the Fire Commission's reporting methodology results in misleading statistics. Further, many fires are omitted from the report entirely by design. For example, there are no statistics for the number of fires for which igniting objects were "Undetermined." Of the reports that I received approximately 40% documented the "igniting object" as being "undetermined.

- In instances where the smart meter melted and was so badly damaged that no inspection could occur, the igniting object would be reported as "undetermined."
- In instances where the firemen may have believed the smart meter to be involved, but where the meter was removed before the inspection could occur, the igniting object would be reported as "undetermined."
- In the Garis Report, Table 2 states that since the smart meter program began (2011) there have been no fires on an exterior wall where the igniting object was the electrical panel board or switchboard. This does not concur with the information that I've received. Neither does this statement include fires that have occurred in electrical rooms or on electrical panels. Among the reports I've received, there were 8 where the igniting objects were panels, electrical panels in electrical rooms. 2 examples:

Victoria (Saanich) fire, Dec. 30, 2014 coded 5900, Failed Electrical Distribution Equipment, fire at electrical panel of home.

New Westminster fire, Dec. 2, 2014 coded 5900, Failed Electrical Distribution Equipment, fire at electrical panel of a large condo building.

- Based on the fires I've investigated, <u>approximately 8% of the fires that occurred</u> <u>since the smart meter program began involved a panel or electrical panels in an</u> <u>electrical room</u>. Mr. Garis did not do sufficient investigation to justify any of his conclusions.
- In various Garis Reports, it is stated that fires caused by or attributed to Failed Electrical Distribution Equipment (EDE) would be "most closely related to the meter base, which is directly relevant to the smart meters".. Of the approximately 100 Fire Reports I've received, 15 gave Failed Electrical Distribution Equipment at the ignition source. This is 15% of the random reports I requested, a not insignificant number. The author gives the clear implication that because the number of EDE fires had reduced in frequency, the smart meters had not caused any fires
- But not only is this deduction illogical, but because of the many fires that were not on the Fire Commission system the conclusion that there have been fewer EDE fires is not credible. Whether due to the many "undetermined" fires, or the many fires not on the Fire Commission system, the database upon which the Garis Report was predicated is not accurate or credible.
- 14) (In response to statement that the statistics in BC are similar to those in the US, which also confirm there have been no smart meter fires.)

- Why should we consider this to be a relevant comparison? Has it been confirmed that the US stats are credible and do not have many of the systemic problems that the BC Fire Commission reports have?
- Mr. Norman Lambe, an insurance inspector in the US, has complained that his reports are often incomplete because the utilities are removing the meters from the fire scenes before he can do his job. This fact alone means that these statistics are not credible, and that no one can say that smart meters are not causing fires.
- I have asked several agencies for incidents where the analog meter has caused fires, and have never received a response. Because of the construction material of the meter, which is glass and metal, it is highly unlikely that an analog would be as flammable or prone to fire as a smart meter.
- 15) (In response to statement that FortisBC, employing a device to test meter bases, has found more "hot sockets" that has Hydro.)
  - These numbers indicate that BCHydro was careless, resulting in many more incidents than Fortis.
  - ✓ In one incident which was included in BCSA's annual report for 2012, , during live exchange, the meter and meter base were damaged. The Corix installer volunteered that he/she had received only 8 hours training.
  - During FortisBC's hearing before the BCUC, the issue involving BC Hydro's use of inadequately trained contract help was raised. This may have resulted in more careful installations and the significantly higher rate of repairs being made.

16) (In response to BC Hydro's statistics re. incidents during installation by Corix.)

- BC Hydro reports only 19 incidents. In one report obtained via an FOI request, for the period Sept. 11, 2011- Sept 8, 2014, <u>BC Hydro listed 157 incidents</u> that resulted in damage to the meter, to appliances, to the buildings during the meter exchange or shortly thereafter. This report is not complete. I have found incidents that fall into this category but which were not included in this internal document maintained by BC Hydro. <u>BC Hydro is not tracking incidents</u> <u>during installation</u>. None of its statistics can be considered credible.
- It is obvious that there needs to be a thorough investigation of this issue by an independent group. Why is there no oversight into this program which puts lives and property at risk?
- 17) (In response to Hydro's admission that it does not track post installation incidents.)
  - ✓ How can Hydro or BCUC say there have been no smart meter fires if these are not tracked?

- ✓ Hydro has said, and I have in writing, that when a meter fails or is burned, they do not investigate its failure but rather send the meter straight to ITRON for replacement.
- I suspect that the 12 reports they have indicated were discovered after I reported the incident and asked for information. How many others occurred that I have not asked for?
- 18) (in response to FortisBC's acknowledgement that there have been some "thermal" incidents, while BC Hydro had more incidents which did result in fires.)
  - What is "thermal damage" to the meter if it isn't melting or burning?

So BC Hydro does acknowledge that there were some post-installation fires.

- To what do they attribute these fires?
- Did BC Hydro take full responsibility for these fires or did the insurance company or the individual cover any repair or replacement costs?
- 19) (In response to statement by BCUC that its staff have found fires and failures not previously reported by BC Hydro. In some it cannot be determined if the smart meter was the cause or not.)
  - In the prior section it is said that BCUC staff investigated 3 -7 post installation incidents in addition to the 12 identified by BC Hydro. Now there are 24 that have been identified. Can you please confirm how many were reviewed?
  - On what basis was the conclusion reached that the "vast majority" appear to be related to damaged or faulty meter sockets? Who reached this conclusion? Please provide his qualifications.
  - Were the smart meters that were involved in these incidents inspected? If yes, by whom? If yes, how since BC Hydro returns all failed and burned meters to ITRON immediately.
  - Did the review include incidents where the meters were completely destroyed?
  - Is the BCUC willing to share the details of the 24 post installation incidents with me?
  - What evidence was available and reviewed?
  - Did the review include the evidence submitted with the complaint which included a local fire report stating that the fire was caused by the smart meter?

20) (Re statement that the risk of fires associated with meters has not increased.)

- Are there credible statistics on the number of fires attributed to analog meters over the 5-10 years prior to the smart meter installations?
- What evidence was used to make this assertion?
- 21) (In response to assertion that there is no evidence that there is an incompatibility issue with meter bases. Any incident was random.)
  - What evidence was reviewed to reach this conclusion?
  - Who made this determination? What were his qualifications?
  - What standards were used since these were not certified and such determinations are left up to Hydro?
  - Who has determined that the standards to which the meters were designed were adequate?
  - There were incidents but without tracking how can the determination be made that they are random?
- 22) (In response to statement that there is no indication that these meters have design flaws.)
  - What were the available investigations? Given that the meters are removed, there are many that could not have been investigated
  - How is the incident rate determined when no one is tracking?
  - What evidence was reviewed to arrive at the conclusion that there are no design flaws that have contributed to meter fires or failures?
  - Who were the experts who determined that the smart meters themselves did not cause fires? What were their qualifications?
  - ✓ Given that meters were destroyed or removed, and that there are a high proportion of "undetermined" ignition sources, it is impossible for any determination to be made regarding the safety of smart meters. No conclusion can be drawn from the information that was considered.
- 23) (In response to statement that the use of unqualified and poorly trained installers caused incidents at and immediately after installation.)

- Installations were done under power which is counter to all electrical rules and CSA regulations.
- Incidents at installation were not limited to fires. Many homeowners suffered damages to electronics and appliances as a result of the live exchange. Although some were reimbursed by BC Hydro, many claims were refused by Corix and BC Hydro, with the homeowner or the insurance company to pay for damages.
- Poor installations do not necessarily cause "incidents" at the time the installation is done. Damage to the meter and/or the meter base can and did result in fires/failures weeks later. One example is a home fire that occurred in Coquitlam on Aug. 5, 2012. The smart meter had been installed 2-3 weeks prior to the incident which, according to the fire report, was caused by "failed electrical distribution equipment". BC Hydro removed the meter before the BCSA could investigate the incident, but did pay for repairs.
- Given the lack of accurate tracking, there is no reason to believe BC Hydro's assertion or BCUC's conclusion that lack of training or poor installation procedures did not result in increased incidents. What was the incident rate of fires and damages to electronics, appliances and homes during installations in the 5 years prior to 2011?
- There were any more than 7 fires and major incidents that occurred during installation. A report from BC Hydro obtained via an FOI which included 157 events through Sept. 2014. There is no reason to accept any of the statistics provided by BC Hydro.
- 24) (In response to statement that although smart meters are made in part of combustible materials where the analogs weren't, the statistics in US do not show an increased incidence of meter fires.)
  - None of this is credible because meters are being removed from fires scenes in US and BC.
  - It has been acknowledged and demonstrated that there is no accurate tracking system in BC, and there is no evidence that the reporting done by the states or utilities in the US is any better.
  - What evidence was reviewed that led to the conclusion that the flammability of the material used in the smart meter has not increased the meter-related fires?
  - Who reviewed the evidence and what were his qualifications?
  - ✓ There is no basis for the assertion that smart meter components and materials have not resulted in an increase in meter related fires.
- 25) (In response to statement that the UL certification standard has been developed that addresses flammability.)

- UL certified 2 meters, Landis & Gyr (Texas) and Sensus (Saskatchewan) as meeting UL 2735 standards after these very same meters caused fires and failed. Obviously this standard is inadequate. Something that is considered safe will not cause fires.
- According to industry documents the new standards are being developed as a result of concerns about design flaws that make smart meters fire hazards.

"... design flaws in smart meter units have been known to cause serious fire hazards and spotty performance. This has caused a lot of concern for utilities and manufacturers of smart meters." http://www.metlabs.com/blog/meters/new-ul-2735-electric-utility-meter-standard-ensures-safety-and-performance/

- 26) (In response to admission that BCHydro does not track post installation incidents, but FortisBC does.)
  - Significant evidence has been provided to refute the assertion that BC tracks incidents during installation.
  - This admission by BC Hydro that it does not track post installation incidents is concerning. Why isn't BC Hydro tracking post installation incidents?
    - ✓ Any competent company would want to know failure rates of products it has purchased. Are they not sharing information that they don't want BCUC or the public to know?
    - ✓ Is BC Hydro allowing ITRON to track so it can say BC Hydro is not aware of any failed meter or one that has caused a fire?
    - ✓ If BC Hydro is not tracking and has no statistics regarding failed, burned and meters that caused fires, then the competence of BC Hydro must be questioned.
  - Could BCUC please share the details of the post-installation incidents reported by FortisBC?
- 27) (In response to admission that there are many agencies with different responsibilities for reporting and investigating fires, and little apparent oversight or collaboration.)
  - BCUC is allowing BC Hydro to shed its responsibility for knowing if smart meters are safe or not by saying it relies on other agencies. BC Hydro has been given the responsibility for determining what standards. Point 8 (below) says:

BC Hydro determines what physical and safety standards its meters meet and the certification method

- It seems that BCUC and BC Hydro believe that BC Hydro should be allowed to have it both ways: it sets its own standards but is not held responsible when its standards are not sufficient to ensure public safety
- BCSA -- the agency with the expertise to investigate electrical incidents involving smart meters -- has its hands tied. It has been told it cannot get involved with smart meters or the program. Moreover, it is not called on a consistent basis to investigate incidents, and in many cases instances when it is, the smart meter has been removed. Several regulations are being disregarded leaving no agency to investigate this potentially dangerous device that is put on homes.
- Given the acknowledgement that the investigations are not complete, and that there is a systemic breakdown in tracking, reporting and oversight, what does BCUC recommend be done?
- 28) (In response to admission that BCUC has found that in some instances BC Hydro has removed smart meters from the scene of fires contrary to regulations.)
  - Why are meters being allowed to be removed with impunity? In fact, the Fire Commissioner and BCSA told me that BCHydro was allowed to remove the meters because it was "their equipment". Fire scenes are considered a crime scene until an investigation determines otherwise. Evidence is being removed. And why is Hydro doing this? Why are they preventing an inspector from determining if the meter is a factor in the fire or not.
  - There is no coordination between and among agencies, and no oversight. No one is in charge, leaving the public with a device that is potentially dangerous on homes without choice, without protection.
- 29) (In response to confirmation that utility-owned smart meters are not certified safe by any independent agency and neither are they required to be certified.)
  - This regulation needs to be amended and updated. When written, analog meters were on homes and were deemed, through experience, to be safe. The fact that a utility owns equipment does not mean per se that the equipment is safe. Given that BC Hydro has expert electrical engineers in its employ, why has none been tasked with testing the meter and certifying its safety?
  - Given the many issues identified in this report and through comments, does BCUC agree with this exemption?
  - Who in BC Hydro determines the physical and safety standards for these meters? What are his/their qualifications?

- Does any third party review the standards to determine if they are adequate? What are they? Who confirms the standards are monitored and are met?
- Third party certification is required for accuracy because the public depends on meters measuring honestly and accurately. The public expects, and rightly so, that the meters put on homes will be safe. Why isn't there a requirement that any electrical device, even if owned by a utility, be certified safe by an independent third party?
- Allowing BC Hydro to both set the standards and to determine if it has met those standards is a blatant conflict of interest. And with BC Hydro's obvious inability even to keep accurate records on incidents and to follow regulations, their ability to ensure that even their internal standards are met is dubious, at best.
- Is BCUC satisfied with there being no oversight of the standards of smart meters?
- 30) (In response to BCUC's confirmation that fires or failures that are caused because the base has been damaged perhaps during installation are the homeowners' responsibility. Assertion that problems in meter bases have been found during this process.)

It is difficult to comprehend how a meter that is damaged or otherwise compromised during installation by an employee of the Utility which results in a 'hot socket' is somehow adjudged to be the responsibility of the homeowner. As well, since an uncertified, unregulated digital meter is inserted against the homeowner's wishes into a certified, regulated, analogue meter base and that this inappropriate conjoining results in a hot socket, by what sense of logic and rationality is that somehow the responsibility of a homeowner who never gave permission for (and might have refused) the installation?

It would appear that since the hot socket issue has been such a surprise to the Utility company that it would have been appropriate to do the research before the installation program began instead of after. That it has undertaken this research at all is evidence of the seriousness of this issue and the inappropriateness of putting lives and property in jeopardy while the Utility attempts to fix it on the fly.

It is no surprise that the 'hot socket' issue has improved detection and incident reporting. A meter fire does tend to gain one's attention and spur that person to action.