Add Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Dear\_\_\_\_\_\_\_\_\_\_\_

**Re: 5G and You: How Current Federal Telecommunication Policies are Creating Hazardous Working Conditions for Utility Electric Lineworkers.**

I hope this finds you well. I am writing with an agenda suggestion for your Add Date and Add name of Committee or Working Group of Add Name of Union meeting:

**5G and the Safety of Utility Electric Lineworkers.**

I know the information below is lengthy and somewhat alarming, but the good news is - there are healthy options for creating connectivity, options which do not put electrical workers in harm’s way. Wired fiber to the premises are safer, and always faster than 5G or any wireless networks will ever be. Cancer and other chronic illnesses may take many years to develop. The time to adhere to the precautionary principle and protect ourselves and those we care about is now.

Because I am concerned about the well-being of those working on electric lines, I urge you to:

1. Take a few moments to read what follows, and then
2. Put the issue of EMF exposure on the job on the agenda at your upcoming Women’s Committee meeting.

If you have any questions, or suggestions for anyone else affiliated with IBEW that I may share this information with, please don’t hesitate to contact me,

Warmly,

\_Sign\_\_\_\_\_

Name of Grassroots Group you represent if applicable

**The Hazards Microcells & 5G Pose to Utility Lineworkers**

**The Issue**

*Innovation*, *Science and Industry Canada* (ISI) is allowing utility and light poles to be converted into “small cell” or microcell towers without any public consultation.As a result, **up to five microcells may be, or have been, installed on every residential street.**

**Why the Concern?**

**Utility electrical workers are, or soon will be, working on or near “small cell” towers all the time.** This routine exposure to hazardous **microwave EMF emissions poses a great risk of injury and disability,** additionally so because “small cell” towers are being constructed next to our homes, allowing workers no rest or recovery time. Fire fighters in California have been granted an exemption from having these towers installed on their fire halls due to the health hazards they pose.

**Why Firefighters do *Not* want to Be Exposed to Microcells or 5G**

[Six firefighters living under a cell tower were studied in 2004](https://mdsafetech.files.wordpress.com/2017/10/foster-brown-hon-edmund-g-firefighters-foster-092017.pdf).

Each of the men who had their brains scanned showed a hyper-excitability of the neurons, or brain cells. This is considered to be a precursor to early cell death and potentially early onset Parkinson's, ALS, and Alzheimer's. Now, 8 years later, two of the men have had psychotic breaks with reality and all are suffering from memory impairment. All the men tested in 2004 had tremors, and some were still in their 20's.

After cell tower activation, these firefighters - among the least likely to admit pain or disability - reported:

• mental confusion and difficulty concentrating

• lack of focus and motivation

• memory loss

• mood swings including depression, anger

• sleep disruption and lack of alertness

• chronic headaches

• vertigo

• ringing in the ears

They weren’t working on cell towers. **They weren’t subjected to the intense daily exposure which utility workers currently or will soon face. But as a result of the health hazards revealed in this study, firefighters internationally adopted a resolution calling for no more cell towers on their fire houses.**

**What This Means for You**

When considering radiation exposure and your health there are three important things to highlight – proximity, how often you are exposed, and the strength of the electric magnetic frequencies you are exposed to.

**Research has found cancer clusters up to ¼ mile away from cell towers, but electrical workers work directly in the beam of the antenna**, which places them in the envelope of highest microwave exposure. Wireless companies don’t turn off power to cell towers when workers are present.

Independent surveys of microcells installed in Mission, BC have found **microcell transmitters may exceed the limits established by**[**Health Canada’s Safety Code 6**](http://c4st.org/are_canadians_safe/).  These limits, which are based on how much exposure it takes to cause tissue heating, do not take cumulative, long-term, and non-thermal effects into account. As co-location of small cells is encouraged, utility and light poles will likely have more than one set of antennas resulting in even higher microwave exposure levels for workers.

**Potential Detrimental Affects to Your Health**

[Based on ample research on microwave exposure](https://www.diagnose-funk.org/download.php?field=filename&id=103&class=DownloadItem), **utility workers working near microcells will be at extreme risk** for:

* cancers and tumors, cardiac problems including heart rhythm disturbances, DNA damage, changes in blood, cellular stress and damage, breaches in the blood-brain barrier, neurological damage, brainwave changes and cognitive impacts, strokes, sperm damage, fertility impacts including having children with birth defects, electromagnetic sensitivity (EMS), seizures, blackouts, and what Europeans researchers call “burnout”.

Electrical workers will likely experience nausea and vomiting, dizziness, headaches and migraines, vision problems including cataracts, insomnia, difficulty concentrating and remembering, impaired immunity, pain, ringing in the ears and other hearing problems, hair loss, and weakness and fatigue. [The international literature from scientists and health care professionals is extensive.](https://ehtrust.org/science/research-on-wireless-health-effects/)

[In 2016, the NIH National Toxicology Program announced significant carcinogenic effects from cellphone exposure levels](http://www.saferemr.com/2016/05/national-toxicology-progam-finds-cell.html) after only two years of exposure -- malignant brain tumors, malignant heart tumors, and precancerous lesions, as well as DNA damage.

**5G and You**

**Microcells will be used for 4G and are being promoted for future 5G use.** [5G frequencies are found in “active denial” systems used by the military and police for crowd control, causing acute burning pain](https://www.youtube.com/watch?v=VuVtGldYXK4&feature=youtu.be). Skin reactions – including burns, flushing, rashes, eczema, bruising – already occur with microwave exposure, and [sweat ducts act like antennas when exposed to 5G frequencies](https://smartmeterharm.org/2017/03/14/research-finds-human-sweat-ducts-are-antennas-for-millimeter-waves-5g-resulting-in-high-levels-of-radiation-absorption-by-sweat-ducts-presented-at-nihniehs-sponsored-conference/). Neurological and cardiac impacts, due in part to nerve receptors in the skin, are predicted by experts.

**Microcells and Unions**

If utility workers start becoming impaired and then disabled, what happens? **How much job loss can utility companies absorb before vital maintenance and repair work is jeopardized?** How will this impact unions?

 **It Gets Worse....**

Micro wireless antennas may be installed on or embedded in electrical lines (powerline communication PLC or broadband over powerline BPL). If this happens, utility workers and all electricians will be handling microwave-radiating wires. **Electrical lines will become de facto cell towers.** This radiation will follow the wires into homes and buildings, and occupants will be surrounded by the emissions constantly. [The Austrian Medical Association and 1500 physicians in Switzerland opposed PLC/BPL because of the enormous health hazards](http://www.apdr.info/electrocontaminacion/Documentos/Artigos/OAK20120118.pdf).

**Current Occupational Health Regulations Place You in Harm’s Way**

In 2011, **Radiofrequency electromagnetic fields were classified as a 2B possible carcinogen** by the World Health Organization. [WorkSafeBC regulations](https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-05-chemical-and-biological-substances#SectionNumber:5.57) stipulate that **no employee should be exposed to a 2B carcinogen if an alternative exists**, EXCEPT FOR DEVICES THAT USE OR EMIT NON IONIZING RADIATION (section 7.19). This occupational health loophole puts you at risk.

**To Sum it Up**

**Microcell towers are being installed in the public right of way everywhere** -- outside homes, schools, offices, and in parks, without local government regulation. As previously mentioned, **utility electric lineworkers cannot rest and recover during off-work hours because small cells are being installed next to homes**.

If electrical lines become microwave transmitters, all wiring in the home will emit EMF. Peer reviewed science shows that **this level of constant exposure places electrical workers at severe risk of not just becoming disabled, but of becoming unable to tolerate microwave radiation** and even electrical current in and around their homes and at work, with increased risk of becoming homeless as a result.

With workers forced into early retirement or onto disability and/or workers compensation, or with workers leaving line duty and retraining for less hazardous jobs, utilities could face a future of too few workers to maintain the electric grid.

**A Simple Solution**

**A wired fiber optic connection could serve all our high-speed internet needs**. For mobile use, we could [follow France’s lead](https://www.telecompaper.com/news/paris-to-adopt-more-stringent-emf-radiation-standards--1186734) and reduce the strength of small cell transmitters on our streets, thus reducing the EMF exposure levels of electric lineworkers.

**Steps for You to Take**

1.        Educate yourself on this issue. Here are a few good places to start:

 [TheCalm.ca](http://thecalm.ca/)

 [Environmental Health Trust’s “Educate Yourself” page](https://ehtrust.org/take-action/educate-yourself/)

2.        Share your concerns.

3.        Create an EMF working group within your union.

4.        Encourage your union to:

* lobby telecoms to implement safer technology
* Demand that WorkSafeBC remove the [regulatory loophole](https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-regulation/part-05-chemical-and-biological-substances#SectionNumber:5.57) that does not protect you from electromagnetic fields to the same degree as you are protected from other2B carcinogens.
* Tell Health Canada to revise Safety Code 6 so that it adequately protects Canadians.  [Here](http://www.c4st.org/images/hesa-2015/Dr-Martin-Blank-Presentation-to-HESA-Committee.pdf) is a very good overview of why the code is not protective including a short list of recommendations for change from peer-reviewed scientist Dr. Martin Blank

**Remember, cancer and other chronic illnesses may take many years to develop.  The time to adhere to the precautionary principle and protect ourselves and those we care about, is now.**