

September 20, 2022

RE: Five New England States Announce New Regional Energy Transmission Infrastructure Initiative – Request for Information to Integrate Clean Energy Resources By October 14, 2022

Health and Safety: Association of buried ocean wind cables through Portsmouth, Rhode Island, and Falmouth, Massachusetts residential neighborhoods.

The offshore wind companies are proposing building a 4 cable duct system for 2 HVDC cables now and possibly 2 HVDC cables later in both Falmouth Ma. and Portsmouth, RI.

The current plan is for two bundles of cables equal to 1200 megawatts. To put that in perspective Plymouth, Massachusetts nuclear plant had a total output of 680 megawatts.

Rhode Island & Massachusetts have no legislative requirements for EMF, Electric Magnetic Fields, or other properties of types of electric emissions from high voltage power lines. The fast-growing state of Florida used international standards in the early 1970s to install high-voltage power lines. Over the years Florida enacted legislative setbacks to the high voltage lines because of studies pro and con on childhood leukemia associated with distances to the power lines from residential locations. Florida regulations were recently updated. (see video bottom)

Note; EMF is higher directly above a buried cable vs standing under the same voltage aerial cable.

The installation of HVDC, high voltage direct current cables is brand new in the United States. There are plenty of cancer studies including epidemiologic studies on HVAC high voltage alternating current in the United States but unfortunately none on HVDC. There are no studies due to a lack of interest in HVDC cables in the US.

There are presently four high-voltage direct-current (HVDC) transmission systems operating in all of North America.

There was a questionnaire sent by post and distributed by campaign groups in 1980 to people living near a 400,000 volt HVDC overhead power line in Minnesota, followed up by telephone calls. The survey was called the "Minnesota Landowner Health Perceptions Survey."

Up to 35% of the respondents said they had suffered adverse health effects that they attributed to the HDVC power line.

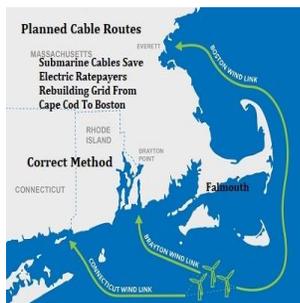
An epidemiologic study was not conducted on the residents. This study and investigation could have compared two or more groups of people who are alike except for one factor, the 400,000-volt high voltage direct current power line. There are no epidemiologic studies in the US for DC cables

The question for the town and neighbors of the buried HVDC cables is whether using international standards to install the cables may be an issue down the road.

How will the RI EFSB and Massachusetts Energy Facility Siting Board mitigate the cable route through residential locations? One method is the cable ducts are stainless steel rather than plastic. The conduits are sealed with SF6 gas to stop any electric power emissions. Sulfur hexafluoride, SF6 is used as an electric insulator.

Keep in mind that a total of 2400 megawatts buried in the street outside a residential neighborhood are equal to over three times the output of the Plymouth nuclear power plant (680 MW) through the streets of Portsmouth.

Anbaric's New New England Ocean Grid proposal correctly shows three ocean submarine cables to Fall River, Boston, and Connecticut to avoid rebuilding the Grid in Rhode Island and SE Massachusetts



#see the Florida video below

Health Risks from Power Lines -Childhood Leukemia

South Miami Town Hall forum on power line safety and nuclear expansion, sponsored by Citizens Allied for Safe Energy (CASE-FL.org), which took place on 12-10-09.

A child living near a high voltage power line may run a higher risk of contracting leukemia — the most common childhood cancer

Video Link: Philip K. Stoddard, Ph.D. Professor Department of Biological Sciences Florida International University Miami, FL 33199 USA

https://www.youtube.com/watch?v=HYqOVoaUVWM&ab_channel=SafeEnergy

Thanks, Frank Haggerty

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