

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No _____

Petition of Charles Larkin and Stephen Whitaker, Pro Se,)
For An Investigation Of The Vermont 911 Emergency)
Calling System Reliability And Planning)

September, 12, 2016

AMENDED PETITION OF CHARLES LARKIN AND STEPHEN WHITAKER
FOR AN INVESTIGATION OF THE VERMONT 911 EMERGENCY CALLING SYSTEM
RELIABILITY AND PLANNING

By this petition made pursuant to the Public Service Board (Board) Rules 2.201(B) and 2.202, petitioners Charles Larkin and Stephen Whitaker, (Petitioners) amend the petition filed on September 8, 2016, and request that the Board open an investigation and determine whether:

(1) recent failures of Vermont's 911 system demonstrate inadequate reliability assurance and testing to provide for the public safety; (2) reduced service quality reporting requirements as are being pursued by FairPoint in Docket 8701 will result in the remaining FairPoint customers possibly having even less reliable access to the 911 emergency calling system; (3) wireless customers attempting to complete emergency calls from Vermont's highways will be negatively impacted by proposed changes to the VTA / CoverageCo grant agreement and build-out requirements; (4) backup power of CoverageCo's microcells and all cellular carriers and their supporting electronics should be required by rule or CPG conditions; (5) backup power for coaxial cable amplifiers and optical electronics should be required for all regulated cable and fiber operators offering voice over internet protocol (VOIP) service and as a condition of, or upon renewal of, a Certificate of Public Good (CPG); (6) E911 vendor FairPoint's decision to no longer rely on SS7 Signal Transfer Points (STPs) prior located in Vermont, and now located in New Hampshire introduces unnecessary and undue vulnerabilities to Vermont's telephone network and emergency calling system; (7) selective router and database functionality required to support the E911 or NG911 systems in Vermont should be located in Vermont; (8) the Vermont Ten Year Telecommunications Plan (10YP) dated 2014 was duly adopted with required public hearings held **on a Final Draft** in accordance with 30 VSA 202d; (9) the 10YP sufficiently adheres to the goals of 30 VSA 202c and sets forth achievable objectives toward those goals; (10) said 10YP is complete in accordance with the requirements 30 VSA 202d and can thereby serve as a reliable basis for state telecommunication policy, especially with regard to 911 system reliability; (11) said 10YP can be found to be consistent with any proposed Incentive Regulation Plan or amendments or renewals thereto

reviewed by the Board under 30 VSA 226b; **(12)** Public and Petitioners' access to the complete, un-redacted versions of the 911 system proposals, plans and failure analysis reports should be made available in full, or whether the Board should supervise a process of *in camera* review, substantiating the validity or lack thereof for claims of exemption based upon risk to public safety or property, or if competitive / trade secret claims of exemption are being abused to obscure or conceal 911 system vulnerabilities, thereby subverting fair and transparent evaluation of competitive system proposals or remedial measures; **(13)** the Board should require the Department and/or an independent public advocate to produce all necessary infrastructure information to examine the 911 network reliability pursuant to the provisions of 30 VSA 202d (d), which states in pertinent part: "To this end, the Department may require the submission of data by each company *subject to supervision by the Public Service Board.*" (emphasis added); **(14)** the Board should similarly require that the preparations for the 2017 10YP now or soon to begin in the information gathering phase, should be conducted pursuant to the above cited 30VSA 202d(d) as contrasted with the conflicting statute 30 VSA 202e (c) cited below which provides for blanket confidential treatment of information produced by 'voluntary disclosure', not under the supervision of the Board, and which impedes meaningful and informed public participation in the 10YP process as is required by statute;

(c)(1) The Director may request from telecommunications service providers voluntary disclosure of information regarding deployment of broadband, telecommunications facilities, or advanced metering infrastructure that is not publicly funded. Such information may include data identifying projected coverage areas, projected average speed of service, service type, and the anticipated date of completion in addition to identifying the location and routes of proposed cables, wires, and telecommunications facilities.

(2) The Director may enter into a nondisclosure agreement with respect to any voluntary disclosures under this subsection, and the information disclosed pursuant thereto shall remain confidential. Alternatively, entities that voluntarily provide information requested under this subsection may select a third party to be the recipient of such information. The third party may aggregate information provided by the entities, but shall not disclose provider-specific information it has received under this subsection to any person, including the Director. The third party shall only disclose the aggregated information to the Director. The Director may publicly disclose aggregated information based upon the information provided under this subsection. The confidentiality requirements of this subsection shall not affect whether information provided to any agency of the State or a political subdivision of the State pursuant to other laws is or is not subject to disclosure.

(15) visible infrastructure in the public right of way, including poles, cables, amplifiers, nodes, splitters, splice boxes, conduits, repeaters, batteries, generators or service drops can be claimed to be confidential as to its location or its owner; **(16)** the Department of Public Service has adequately planned, represented and advocated for the public interest and public safety in each of the above referenced matters; **(17)** an independent public advocate should be appointed for this investigation.

In support of this Petition, Petitioners state the following:

1. Petitioner Charles Larkin is the retired Telecommunications engineer for the Vermont Department of Public Service who served 30+ years, including as the State's first E911 engineer and on several subcommittees with Petitioner Whitaker designing and implementing Vermont (and the nation's) first statewide enhanced 911 system.
2. Mr. Larkin who is now elderly and physically infirm, yet mentally astute and active, is also a Comcast VOIP customer relying on Comcast internet connectivity for telephone access to voice and emergency calling services from his home in Middlesex where limited reliable cellular phone signal exists.
3. Mr Whitaker is a information policy and technology expert who has been involved in the design and implementation of the original Vermont E911 system, the Geographic Information System and IT policy and accountability in Vermont since the early 1990s. He has demonstrated a personal and unique commitment to assuring that Vermont's 911 emergency calling system is reliable, accountable and affordable. Petitioners were both very active in the 10YP process to no avail in 2013 and 2014.
4. FairPoint and the Department of Public Service entered into a Memorandum of Understanding in Docket 8390 dated August 10,2015 (Docket 8390 MOU). The Board approved the MOU in its Docket 8390 Order and in so doing, derailed or postponed the more complete examination of the reliability of the 911 systems.
5. Docket 8390 was thus concluded prior to technical hearings and thus the evidentiary record was not developed adequately to inform the Board nor petitioners' preparation of sufficiently detailed invited comments in that docket. The parties in 8390, FairPoint and the DPS had both opposed appointment of an independent public advocate in the pending IRP docket, and thus compromised the public advocacy and thorough 911 examination toward an expedited deregulation petition pursued in Docket 8701.
6. The E911 board in 2015, represented by then director David Tucker, intervened and was granted party status in Docket 8390. The purported resolution of that docket by MOU did nothing to address the many vulnerabilities of the E911 system which have yet to be examined. David Tucker then retired.
7. The 911 Board had prior awarded a new contract to FairPoint for 911 systems absent any independent network engineering review of the proposed technology infrastructure as required by statute nor was there any verification of detailed network reliability standards as required by the Request for Proposal.

8. FairPoint implemented its Next Generation 911 (NG911) system for Vermont in 2015 utilizing new i3 standard for Text to 911 implementation which FairPoint had not prior deployed in any other state.
9. The copper local loop infrastructure built by Vermont's regulated incumbent local exchange carriers, (ILECs) and paid for by Vermont ratepayers during an era which provided ILECs with a guaranteed rate of return, includes central office battery backup and provisions for placement and interconnection of central office generators when those high capacity batteries run low.
10. No such extended runtime battery backup is in place for Comcast's and other Vermont coaxial cable company infrastructure, nor VOIP over fiber customers, other than some very limited run-time batteries installed in some but not all customers' homes. The pole mounted coaxial amplifiers and optical hubs and routers in cabinets or on the poles lack sufficient backup power for emergencies, nor are there plans nor space reserved for generators' placement, fueling, security and interconnection to keep the VOIP phone services working during extended power outages.
11. The 911 system failed on June 22, 2016 due to inadequate exception handling routines in the software coding. Said software failure was also controlling the automatic call distribution and other voice functions, thereby its being unable to handle a minor error condition resulting from a missing “-” or dash, in the character string, resulted in a total system failure wherein all 911 voice and text calls were unable to be heard or answered in Vermont or elsewhere.
12. The 911 system failed again on August 1, 2016 for as yet unknown reasons.
13. VPR News reported on September 2, 2016 (attached to petition Filed September 8) that the DPS was supporting the removal and/or redeployment of CoverageCo. microcell receivers along Vermont highways funded by a grant from the Vermont Telecommunications Authority. Such changes are being made in a manner which will negatively effect the ability of Vermont travelers to complete 911 emergency calls from some as yet unknown number of locations.
14. Town of Strafford First Selectman John Freitag described his unsuccessful efforts to resolve an long running issue with a CoverageCo microcell mounted on a pole along Route 132 in Strafford, VT. Mr. Freitag described his effort briefly in the comment section of the VPR web following the above referenced story as well as in conversation with Petitioner Whitaker. The CoverageCo equipment on the pole was said to have been installed two years ago and has yet to be connected or provide any service whatsoever, leaving travelers and residents in the area with an inability to reach 911 emergency services using cellular telephones.

WHEREFORE, Petitioners respectfully request that the Public Service Board:

- a.** Identify and notify all necessary parties to the proposed investigation;
- b.** Schedule an initial pre-hearing conference to establish procedures applicable to this Petition, the scope of the issues to be addressed in this investigation and a schedule;
- c.** Find that the public safety requires that all telephony services, including those provided over coaxial, fiber optic, cellular and microcell infrastructure, including VELCO's statewide radio and fiber optic network should be protected by adequate battery and generator back-up to support extended run-time for emergency calling and radio communications;
- d.** Find that systems supporting emergency calling are '*critical infrastructure*' and of paramount importance and priority in establishing terms and conditions of all regulated utilities' CPGs;
- e.** Find that the Ten Year Telecommunications Plan as currently adopted by the Department of Public Service is inadequate, as a matter of fact, and as a matter of law, to support the statutory review and any required finding of consistency with Contract Regulation or Incentive Regulation Plans under 30 VSA 226a and 226b respectively.

Dated at Montpelier this 12th day of September, 2016 by self-represented petitioners:

signed

signed

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