

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Petition of Green Mountain Power Corporation for	)	
approval of its new Multi-Year Regulation Plan	)	Case No. 25-1955-PET
pursuant to 30 V.S.A. Sections 108, 209, 218, and	)	
218d	)	

Tariff filing of Green Mountain Power	)	
Corporation for a 7.5% rate increase effective	)	Case No. 26-0096-TF
with bills rendered on or after October 1, 2026	)	

**PREFILED REBUTTAL TESTIMONY
OF KAMRAN HASSAN
ON BEHALF OF
GREEN MOUNTAIN POWER**

May 27, 2026

Summary of Testimony

Mr. Hassan's testimony responds to the testimony of Michael Ivey and further describes and clarifies GMP's pole inspection program.

**PREFILED REBUTTAL TESTIMONY OF
KAMRAN HASSAN
ON BEHALF OF GREEN MOUNTAIN POWER**

1 **Q1. Please state your name and occupation.**

2 A1. My name is Kamran Hassan, and I am the Director of Substation Operations at Green
3 Mountain Power (“GMP”).

4 **Q2. Have you previously submitted testimony in this proceeding?**

5 A2. Yes, I previously provided prefiled direct testimony in this proceeding on January 16,
6 2026.

7 **Q3. What is the purpose of your testimony?**

8 A3. My rebuttal testimony responds to the testimony of Michael Ivey and describes GMP’s
9 pole inspection program, which is based on industry best practices and performed by a
10 leading inspection contractor in the U.S., aligns with NESC guidelines, and results in
11 efficient pole inspections that promote safety and reliability for our team members and
12 customers.

13 **Q4. Mr. Ivey provided a recommendation that GMP incorporate further pole strength**
14 **calculations into its pole inspection program, based on his understanding of GMP’s**
15 **inspection program, and the National Electric Safety Code (NESC). Can you**
16 **summarize your response to his recommendation?**

17 A4. We appreciate Mr. Ivey’s review and share his goal of ensuring GMP’s infrastructure
18 remains safe and is properly inspected and efficiently replaced, but I disagree that his

recommended additional measure is necessary or required to achieve those shared goals. His recommendation would impose a substantial additional burden with limited benefits and increased costs, and result in an inspection program that is inconsistent with industry best practices. His recommendation appears to be based on a misunderstanding of our pole inspection program and protocols, which I provide further detail on below.

Q5. Can you summarize GMP's current pole inspection program?

A5. GMP employs Osmose Utility Services, Inc. ("Osmose") to conduct inspections of our transmission and distribution poles, which are inspected on a 10-year cycle. Osmose has been a developer and leading provider of inspection maintenance and repair systems for wood and steel utility structures for over 80 years and has been employed by several Vermont utilities. Pole inspections consist of a visual inspection, sounding and boring, partial excavation, installation of a pole stencil, and a digital photo.

A visual inspection of all wood poles is conducted from the groundline to the top of the pole, identifying structural defects such as woodpecker holes, split or decayed tops, broken insulators, rotten or broken crossarms, and broken or compromised guy wires. If the visual inspection reveals a significant defect, the inspector may either reject the pole immediately, identifying it as a priority candidate for replacement, or continue with the sounding and boring and partial excavation.

All poles that pass the visual inspection are excavated on two sides of the pole to a depth of 6", where possible. Poles are then sounded with a hammer to identify and locate exterior and interior pockets of decay below and above grade. The pole inspector

1 bores at least once to detect pole decay and uses a shell thickness indicator if interior
2 decay is detected. Bores are cut using a 3/8” bit at a 45 degree angle to a depth of the
3 center line of the pole. Bore holes are located approximately 6” below ground on
4 excavated poles, or at groundline for non-excavated poles. If decay pockets are evident
5 within a pole, the inspector continues to bore to determine the size and extent of the
6 decay. Bored holes are plugged with tight-fitting treated wood dowels or plastic plugs.
7 The inspector also may at their discretion proceed with a shell boring within the 2-3” of
8 outer shell of the pole, and is intentionally bored off center.

9 **Q6. How does this pole inspection program relate to the National Electric Safety Code?**

10 A6. Rule 214A1 of the National Electric Safety Code (NESC) states that “in-service lines and
11 equipment shall comply with these safety rules when placed in-service,” meaning that the
12 design and construction requirements of overhead lines is determined by the applicable
13 code book at the time of installation. Rule 214A2 states that “lines and equipment shall
14 be inspected at such intervals as experiences has shown necessary,” meaning that the
15 utility exercises discretion when determining the frequency of inspections and the
16 inspection criteria. GMP’s pole inspection program is compliant with Rule 214A2.

17 **Q7. What are the strength thresholds governing pole strength and deterioration under**
18 **the NESC?**

19 A7. NESC Section 24 defines the appropriate grade of construction to be used in designing
20 structures, Section 25 defines the structural loading for grades B and C, and Section 26
21 defines the strength requirements for overhead structures. NESC Table 261-1 summarizes

1 the strength requirements for construction grades B and C when structures are designed
2 to withstand the loading requirements of rules 250B or 250C. Footnotes 2 and 3 of table
3 261-1 state that, “[w]ood and reinforced concrete structures shall be replaced or
4 rehabilitated when deterioration reduces the structure strength to 2/3 of that required
5 when installed” for structures designed using the loading of Rule 250B, or “3/4 of that
6 required when installed” for structures designed using the loading of rule 250C.

7 **Q8. To your understanding, how does Osmose calculate pole strength and deterioration?**

8 A8. The inspector inputs measurements of decay and damage conditions into a proprietary
9 strength calculating software program to calculate the remaining groundline strength or
10 minimum groundline effective circumference. Measurements are entered with respect to
11 the orientation of the angle of the overhead wire, and the program models the resulting
12 cross section. Program outputs include an estimated percent of remaining strength (for
13 poles that have been excavated, sounded, and bored) and the traditional measure of
14 Groundline Effective Circumference (for all inspected poles). Groundline Effective
15 Circumference is the circumference of a smaller, structurally sound pole that
16 approximates the bending capacity equivalent to the decayed pole’s remaining strength.

17 **Q9. For poles having a ruling load case under the 250B rule, what percent of remaining**
18 **strength threshold for replacement does Osmose use?**

19 A9. Two-thirds (or 67%), as defined in footnote 2 of Table 261-1 of the NESC.

1 **Q10. What percent of remaining strength threshold for replacement is used for poles**
2 **having a ruling load case under the 250C or 250D rule?**

3 A10. Three-fourths (or 75%), as defined in footnote 3 of Table 261-1 of the NESC.

4 **Q11. Do all poles in the GMP system have a reject threshold of 67%?**

5 A11. No. Certain poles that are both over sixty feet in height above ground or water level and
6 have load modeling indicating that 250C or 250D is the worst-case scenario have a reject
7 threshold set to 75%. Poles in the GMP system that have a load case under the 250B rule
8 have a reject threshold of 67%. The majority of poles in GMP's system fall under the
9 250B rule.

10 **Q12. Is the methodology for pole inspections and determining the need for replacement**
11 **utilized by Osmose aligned with NESC guidelines?**

12 A12. Yes. Osmose calculates remaining pole strength based on pole class and not construction
13 grade. This methodology is aligned with NESC guidelines. NESC's definitions of
14 construction grades integrates both strength and load factors. Accordingly, Osmose
15 calculates remaining pole strength based on multiple measured values that are based on
16 strength and load factors, as described above.

17 **Q13. Is the inspection methodology used by Osmose the industry standard methodology?**

18 A13. Yes. Osmose performs utility pole inspections for utilities across the country. The
19 proprietary strength calculating software referred to above was developed by Osmose to
20 calculate pole strength based on NESC guidelines and industry specifications. This
21 standard methodology implemented by Osmose is in alignment with NESC guidelines

1 and results in appropriate identification of poles that are in need of being replaced or
2 upgraded.

3 **Q14. Mr. Ivey referred to a discovery response provided by GMP in this matter related to**
4 **your pole inspection program. Can you provide further context on that response?**

5 A14. Yes. Because the vast majority of poles in the GMP system fall under the 250B rule, our
6 discovery response indicated that poles are scheduled to be replaced or upgraded once
7 pole strength falls below 67%, which is the appropriate strength threshold under NESC
8 guidelines. To the extent that our response was unclear, we clarify that poles are
9 identified for replacement depending on the relevant ruling load case for each specific
10 pole. Poles are replaced or upgraded if pole strength drops below their specific intended
11 strength requirements.

12 **Q15. What would be the operational impact of checking poles against a strength**
13 **calculator based on design parameters rather than observed pole class, as suggested**
14 **by Mr. Ivey?**

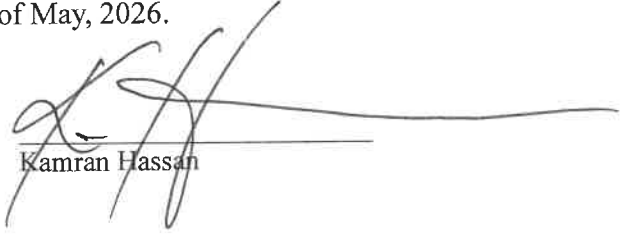
15 A15. Mr. Ivey's recommendation would be burdensome and would not result in more efficient
16 and accurate assessment of remaining pole strength. The current methodology employed
17 by Osmose utilizes measured values of both load and strength, factoring in measured and
18 observed damage and decay. This is the industry standard inspection methodology.
19 Implementing Mr. Ivey's recommendation would require requesting a non-standard
20 inspection methodology from Osmose, which in turn would increase costs with limited
21 additional benefits.

1 **Q16. Does that conclude your testimony at this time?**

2 A16. Yes, it does.

I, Kamran Hassan, declare that the testimony and exhibits that I have sponsored are true and accurate to the best of my knowledge and belief and were prepared by me or under my direct supervision. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at RUTLAND, VT on the 27th day of May, 2026.



Kamran Hassan