

**COMMONWEALTH OF MASSACHUSETTS  
DEPARTMENT OF PUBLIC UTILITIES**

**FITCHBURG GAS AND ELECTRIC COMPANY D/B/A UNITIL;  
THE BERKSHIRE GAS COMPANY;  
BOSTON GAS COMPANY D/B/A NATIONAL GRID;  
LIBERTY UTILITIES (NEW ENGLAND NATURAL GAS COMPANY) CORP. D/B/A  
LIBERTY;  
EVERSOURCE GAS COMPANY OF MASSACHUSETTS D/B/A EVERSOURCE  
ENERGY; AND  
NSTAR GAS COMPANY D/B/A EVERSOURCE ENERGY**

**D.P.U. 24-GSEP-01 THROUGH D.P.U. 24-GSEP-06**

**JOINT SURREBUTTAL TESTIMONY OF  
DAVID P. LITTELL and DEAN M. MURPHY  
On behalf of  
THE OFFICE OF THE ATTORNEY GENERAL**

**March 4, 2025**

## TABLE OF CONTENTS

I.	THE LDCs MISSTATE THE FUNDAMENTAL PURPOSE OF GSEP.....	1
II.	THE LDCs INCORRECTLY SUGGEST THAT CLIMATE-FOCUSED LEGISLATIVE AND POLICY CHANGES ARE BEYOND THE SCOPE OF THIS PROCEEDING. ....	2
III.	THE LDCs INCORRECTLY SUGGEST THAT REPAIRING LPP IS NOT ALIGNED WITH THE PURPOSE OF GSEP.....	10
IV.	THE LDCs MISCHARACTERIZE THE CONSEQUENCES OF LOWERING THE GSEP CAP.....	11
V.	THE LDCs MINIMIZE THE SIGNIFICANCE OF THEIR DEPARTURE FROM THE GSEP PLANS. ....	16
VI.	THE LDCs MISCONSTRUE THE REQUIREMENTS OF THE DIMPs.....	18
VII.	THE LDCs INCORRECTLY STATE THAT INTERGRATED ENERGY PLANNING ("IEP") IS BEYOND THE SCOPE OF THIS PROCEEDING.....	22

**I. THE LDCs MISSTATE THE FUNDAMENTAL PURPOSE OF GSEP.**

**Q. How do the LDCs characterize the fundamental purpose of GSEP?**

A. The LDCs state that the purpose of GSEP is “to reduce [Leak-Prone Pipe (“LPP”)] on the LDCs’ system through targeted and systematic removal and replacement.”<sup>1</sup> Throughout their testimony, the LDCs assume that the fundamental purpose of GSEP is proactively replacing all LPP with new gas pipe.<sup>2</sup> The LDCs acknowledge that GSEP accounts for more than half of each LDCs’ capital expenditure (“CapEx”) and state that it “simply is unsurprising” that a significant portion of their CapEx goes towards pipe replacement and associated materials.<sup>3</sup> The LDCs put forward a view of the GSEP statute that grants them the authority to replace *all* their aging infrastructure with new gas pipe regardless of the costs to ratepayers and without consideration of whether that new pipe is at risk of becoming stranded long before its nominal useful service life (engineering life).

**Q. Do you agree with the LDCs’ characterization of the fundamental purpose of GSEP?**

A. No. The fundamental purpose of GSEP is to accelerate remediation of LPP to improve gas system safety and reliability.<sup>4</sup> The LDCs acknowledge that GSEP balances the obligation to ensure safety and system integrity with the cost impact to consumers.<sup>5</sup> At the same time, they misconstrue GSEP as a system-wide infrastructure replacement tool for all pipe

---

<sup>1</sup> Exh. LDC-Rebuttal-1, at 11.

<sup>2</sup> *Id.* at 15, 28, 67.

<sup>3</sup> *Id.* at 17.

<sup>4</sup> Exh. AG-DL-DM-1, at 7 (*citing National Grid*, D.P.U. 18-GSEP-03, Order, at 21 (Apr. 30, 2019)).

<sup>5</sup> Exh. LDC-Rebuttal-1, at 10.

1 classified as LPP, upgrading older pipe with new pipe and recovering the costs from  
2 ratepayers on an accelerated basis.<sup>6</sup> By focusing almost exclusively on pipe replacement,  
3 the LDCs have and will continue to imprudently incur excessive costs that are not  
4 consistent with a balance between safety improvements and ratepayer costs.

5 Furthermore, GSEP must be considered in the context of recent 2024 amendments to the  
6 GSEP statute, as well as other climate-focused legislative and regulatory developments.  
7 These changes require consistency with Chapter 21N—a greater emphasis on non-pipeline  
8 alternatives (“NPAs”) and consideration of other, less costly measures such as repair for  
9 pipes that may be decommissioned in the future. An unmeasured, relentless pipe  
10 replacement program is not the statutory GSEP mandate.

11 **II. THE LDCs INCORRECTLY SUGGEST THAT CLIMATE-FOCUSED**  
12 **LEGISLATIVE AND POLICY CHANGES ARE BEYOND THE SCOPE OF THIS**  
13 **PROCEEDING.**

14 **Q. The LDCs argue that the circumstances leading to the enactment of Section 145 have**  
15 **not changed since 2014.<sup>7</sup> Do you agree?**

16 **A.** No. The assertion that the circumstances surrounding GSEP have not changed since 2014  
17 disregards the Legislature’s amendments to the GSEP statute, the net-zero GHG emissions  
18 mandate in Chapter 21N and subsequent sector-specific sublimits, as well as the  
19 Department’s D.P.U. 20-80-B and 20-80-C Orders in the “Future of Gas” docket. Our  
20 direct testimony detailed each relevant statutory and regulatory change since 2014.<sup>8</sup> These

---

<sup>6</sup> See Exh. AG-DL-DM-1, at 6–16.

<sup>7</sup> Exh. LDC-Rebuttal-1, at 23.

<sup>8</sup> Exh. AG-DL-DM-1, at 17–19.

1 changes indicate that the Commonwealth is taking clear and decisive steps away from  
2 greenhouse gas (“GHG”) emitting fuels.

3 The following statutory and regulatory changes explicitly alter the GSEP program and  
4 context: (1) *An Act Driving Clean Energy and Offshore Wind* (2021) amended the GSEP  
5 statute to require LDCs to consider advanced leak repair technology and allow LDCs to  
6 replace LPP with non-emitting thermal energy;<sup>9</sup> (2) the Department’s D.P.U. 20-80-C  
7 Order stated that LDCs must conduct an NPA analysis before investing in gas infrastructure  
8 through GSEP;<sup>10</sup> and (3) the recent 2024 revisions to the GSEP statute make several  
9 notable amendments, including requiring compliance with Chapter 21N, an assessment of  
10 potential stranded assets, and removal of the word “replacement” from the definition of  
11 eligible infrastructure.<sup>11</sup> The LDCs’ business-as-usual approach that these GSEP statutory  
12 and regulatory obligations have not changed is wrong.

13 **Q. The LDCs argue that they have already incorporated the climate-focused legislative**  
14 **and regulatory changes into their GSEPs.<sup>12</sup> Do you agree?**

15 No. The LDCs’ administration of the GSEP program has changed very little. The  
16 Companies point to their interim NPA process, but our initial testimony demonstrated that  
17 the overwhelming majority of GSEP projects were excluded from NPA analysis before the  
18 cost-benefit step.<sup>13</sup> The LDCs’ rebuttal testimony does not indicate that any of the GSEP

---

<sup>9</sup> St. 2022, c. 179, § 58.

<sup>10</sup> *Future of Gas*, D.P.U. 20-80-C, Order, at 21 (Apr. 2, 2024).

<sup>11</sup> St. 2024, c. 239, § 81.

<sup>12</sup> Exh. LDC-Rebuttal-1, at 24.

<sup>13</sup> Exh. AG-DL-DM-1, at 25.

1 projects selected for NPA analysis have resulted in NPA implementation. The Companies  
2 highlight that the interim NPA framework is expected to evolve in response to the work of  
3 the NPA Working Group.<sup>14</sup> A meaningful NPA process—one that actually results in NPA  
4 installation—is but one element of compliance with the relevant legislative and regulatory  
5 changes.

6 In addition to NPA analysis, Unitil points to its decommissioning analysis: “The company  
7 performed hydraulic analysis on each street covered in the 2025 GSEP plan to determine  
8 if the gas main was ‘Essential’ or ‘Non-Essential.’”<sup>15</sup> An essential gas main is “required to  
9 be maintained for supply to downstream customers.”<sup>16</sup> Conversely, a non-essential gas  
10 main has no gas service directly connected and can be decommissioned and abandoned.<sup>17</sup>  
11 This decommissioning analysis is prudent and prevents costly upgrades likely to waste  
12 ratepayer dollars. That said, this kind of decommissioning analysis alone is not sufficient  
13 to comply with the recent climate-focused changes given that most LPP will likely service  
14 existing customers and be considered “essential.”

15 We agree that addressing LPP should continue, but the way GSEP work is conducted must  
16 shift to account for the Commonwealth’s climate mandates and the Department’s Orders.

17 To do so, the LDCs must move away from their strategy of proactive replacement of

---

<sup>14</sup> Exh. LDC-Rebuttal-1, at 11.

<sup>15</sup> *Unitil*, D.P.U. 24-GSEP-01, Exh. Unitil-RKCL-1, at 28.

<sup>16</sup> *Id.*

<sup>17</sup> *Id.*

1 essentially all LPP with upgraded pipe. The Companies should pursue a combination of  
2 decommissioning planning, NPAs, LPP repair to buy time, and replacement with upgraded  
3 gas pipe only where necessary.

4 **Q. The LDCs state that “[t]he Legislature has declined to materially change the current**  
5 **GSEP framework.”<sup>18</sup> Do you agree?**

6 A. No. After reviewing the GSEP Working Group report,<sup>19</sup> the Legislature made several key  
7 amendments to the GSEP statute, which materially change the GSEP framework. As noted  
8 above, the Legislature made the following substantive changes to the GSEP statute: (1)  
9 LDCs must “comply with the limits and sublimits established pursuant to chapter 21N of  
10 the general laws”; (2) the original language of “eligible infrastructure replacement” has  
11 been replaced with “eligible infrastructure measure”; and (3) the GSEP plans must include  
12 “a description of customer costs and benefits under the plan, including the costs of potential  
13 stranded assets and the benefits of avoiding financial exposure to such assets.”<sup>20</sup> We will  
14 discuss each of these changes below.

15 **Q. The GSEP statute now requires LDCs to comply with the limits and sublimits**  
16 **established pursuant to Chapter 21N. How is this a material change?**

17 A. This is a material change because it requires that the LDCs consider GSEP in the context  
18 of the Commonwealth’s climate mandates for the entirety of the natural gas sector. The  
19 LDCs attempt to frame this language as applying only to natural gas distribution and

---

<sup>18</sup> Exh. LDC-Rebuttal-1, at 14.

<sup>19</sup> GSEP Working Group Report and Recommendations (Jan. 31, 2024), available at:  
<https://www.mass.gov/info-details/gseps-pursuant-to-2014-gas-leaks-act>.

<sup>20</sup> St. 2024, c. 239, § 81; Exh. AG-DL-DM-1, at 18.

1 services.<sup>21</sup> The statutory change, however, is not limited to the natural gas distribution  
2 sector; rather, it requires broad compliance with Chapter 21N's GHG emissions limits and  
3 sublimits. This means that the LDCs must consider all emissions related to the natural gas  
4 sector, including Scope 3 emissions from natural gas combustion by customers (which of  
5 course is the purpose for which the LDCs distribute it), as well as Scope 1 emissions from  
6 gas leaks. While replacing LPP with new pipe reduces Scope 1 emissions, it also tends to  
7 lock in the much larger Scope 3 emissions because it invests in the longevity of the natural  
8 gas distribution system, increasing the likelihood that customers combust gas for decades  
9 to come at or even above current throughputs. Decommissioning pipe and services and/or  
10 replacing LPP with an NPA is much more aligned with the Commonwealth's climate goals  
11 than the LDCs' current unmitigated replacement approach. NPAs address the much greater  
12 magnitude of Scope 3 emissions, as well as the smaller Scope 1 emissions. If a segment of  
13 LPP may be a candidate for decommissioning or for targeted electrification in the future,  
14 the LDC may consider monitoring or repairing the pipe (if immediate action is necessary  
15 to address an actual or imminent leak) to allow time for customers to transition to  
16 alternative heating systems and allow the later decommissioning of the LPP. This may be  
17 much less costly than replacing the LPP and creating an asset that may be stranded long  
18 before the end of its engineering life.

19 **Q. The GSEP statute now reads “eligible infrastructure measure” instead of “eligible**  
20 **infrastructure replacement.” How is this a material change?**

---

<sup>21</sup> Exh. LDC-Rebuttal-1, at 52.



1 A. This is a material change because it indicates that GSEP is no longer a simple replace and  
2 upgrade program for all LPP with new gas pipe. The LDCs should also be considering  
3 other means of remediation, namely decommissioning, NPAs, and targeted repairs of LPP  
4 to allow enough time to implement decommissioning and/or NPAs.

5 Chairman Barrett's letter discusses the purpose of the revised GSEP statute: "the single-  
6 note emphasis on wholesale replacement would cost ratepayers more than was necessary.  
7 It would also promote excessive greenhouse gas emissions that would last well past 2050  
8 and even 2060."<sup>22</sup> Chairman Barrett explains that the Legislature changed "replacement"  
9 to "measure" to "clarify that outright replacement of leak-prone pipe is one option for  
10 GSEP but no longer the only one."<sup>23</sup>

11 **Q. The GSEP statute now requires LDCs to consider the costs of potential stranded**  
12 **assets and the benefits of avoiding financial exposure to stranded assets. How is this**  
13 **a material change?**

14 A. This is quite a material change because it requires LDCs to conduct a new cost-benefit  
15 analysis regarding stranded assets in the GSEP plans filed with the Department. As  
16 expressed by Chairman Barrett above, the Legislature was concerned that LDCs' business-  
17 as-usual approach to GSEP will "cost ratepayers more than was necessary,"<sup>24</sup> causing new  
18 pipe to become stranded before the end of its engineering life as the Commonwealth  
19 transitions to renewable energy and away from natural gas use.

---

<sup>22</sup> D.P.U. 24-GSEP-01 through D.P.U. 24-GSEP-06, Comments by Chairman Barrett, at 2 (Jan. 10, 2025).

<sup>23</sup> *Id.* at 4.

<sup>24</sup> *Id.* at 2.

1 As discussed in our initial testimony, wholesale replacement of LPP with new pipe made  
2 sense when the Commonwealth reasonably assumed that natural gas would be the  
3 predominant energy source for residents and business for the indefinite future.<sup>25</sup> Now,  
4 however, the Legislature has rejected wholesale replacement. The LDCs can expect that  
5 significant portions of the natural gas distribution system will be decommissioned in favor  
6 of NPAs and targeted electrification over the coming decades.

7 The Legislature revised GSEP's statutory language so that the LDCs are obligated to make  
8 prudent economic investments that minimize the long-term cost burden on ratepayers.  
9 Instead of accepting their prudence responsibility of complying with this statutory change,  
10 the LDCs appear to reject the GSEP statutory amendment: "[t]o the extent that there could  
11 be stranded assets on the gas distribution system resulting from an energy transition in the  
12 Commonwealth, that issue is not within what we understand to be the scope of the GSEP  
13 statute or docket."<sup>26</sup> The fact that the LDCs would ignore actual language in the GSEP  
14 statute is reckless, costly, and concerning.

15 In response to our direct testimony on stranded assets, the LDCs state that the AGO  
16 "assumes that all pipeline will become obsolete by 2050."<sup>27</sup> Our testimony did not make  
17 this assertion. Instead, we discuss the reasonable likelihood that gas throughput and  
18 customer sales will decrease dramatically (as they must to achieve the sublimits established

---

<sup>25</sup> Exh. AG-DL-DM-1, at 29.

<sup>26</sup> Exh. LDC-Rebuttal-1, at 28.

<sup>27</sup> *Id.* at 28.

1 under Chapter 21N), and we observe that the LDCs have a prudence obligation to adopt a  
2 process to “cost effectively decommission much of their natural gas infrastructure over the  
3 upcoming two decades.”<sup>28</sup> By mischaracterizing our direct testimony as unreasonably  
4 expecting total removal of the LDC system by 2050, the LDCs attempt to distract from the  
5 fact that they have not taken into account the probability that at least a portion of GSEP  
6 investments will incur unnecessary costs on ratepayers as gas use declines dramatically  
7 from their current throughputs and customer numbers. The LDCs should be required to  
8 revise their proposed GSEP plans to include decommissioning planning, involve customer  
9 outreach for long-term NPA planning, and identify the benefits to ratepayers of avoiding  
10 the expenditures of the large-scale pipe upgrades under GSEP.

11 **Q. The LDCs assert that the AGO’s expert testimony tries to resolve pending policy**  
12 **issues that far exceed the scope of the proceeding. Do you agree?**

13 A. No. We raise issues well within the scope of GSEP and this proceeding. The changes that  
14 have been codified in the text of the GSEP statute require the LDCs to comply with the  
15 limits and sublimits established pursuant to Chapter 21N, including consideration of  
16 stranded asset risk. These are now integral parts of GSEP, which remains a key issue in the  
17 future of gas discussion because it is the vehicle the LDCs use to replace and reinforce  
18 most of their natural gas infrastructure. By claiming that the statutory changes are not  
19 GSEP-related, the LDCs attempt to move these issues into other dockets, which will not  
20 impact the majority of the LDCs’ capital expenditures.

---

<sup>28</sup> Exh. AG-DL-DM-1, at 31.

1 We also observe that the LDCs attempt to insulate GSEP activity from the future of gas  
2 dockets, perhaps because the legislative and Department Orders in those dockets will lead  
3 to fewer upgrades and replacements with new pipe. We believe the GSEP statute and  
4 Department Orders in D.P.U. 20-80-B and D.P.U. 20-80-C make clear that the LDCs must  
5 prudently plan meaningful alternatives to re-building and upgrading the gas distribution  
6 system. This will include, where appropriate, immediate decommissioning of unnecessary  
7 sections of LPP and services, consideration of NPAs, targeted electrification, and repairing  
8 leaks as alternatives to replacement.

9 **III. THE LDCs INCORRECTLY SUGGEST THAT REPAIRING LPP IS NOT**  
10 **ALIGNED WITH THE PURPOSE OF GSEP.**

11 **Q. Please summarize the LDCs' arguments regarding repair of LPP.**

12 A. The LDCs state that repair of LPP does not “effectively support the underlying purpose of  
13 GSEP, to reduce LPP on the LDCs’ systems through targeted and systematic removal and  
14 replacement.”<sup>29</sup> The Companies assert that, though repairing LPP may mitigate leaks,  
15 repairing LPP does not eliminate the safety risks associated with LPP.<sup>30</sup> They further argue  
16 that the only way to reduce the risk from material failure is through replacement.<sup>31</sup>

17 **Q. Do you agree that repairing LPP “does not effectively support the underlying purpose**  
18 **of GSEP”?**

19 A. No. As discussed above, we disagree with the LDCs’ assertion that the purpose of GSEP  
20 is to replace and upgrade all LPP with new pipe. Repairing LPPs supports the purpose of

---

<sup>29</sup> Exh. LDC-Rebuttal-1 at 11.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

1 GSEP to advance system safety and reliability. Importantly, repair generally costs less than  
2 replacement, thereby minimizing potential stranded assets consistent with the statute. The  
3 LDCs argue that repairing LPP does not reduce the cost of GSEP because it only delays  
4 inevitable replacement.<sup>32</sup> This is not true, of course; repair (or simply enhanced monitoring  
5 of a pipe that is not actively leaking) can be a successful strategy to reduce risks in the  
6 interim to provide time to transition customers off gas.

7 The LDCs are incorrect that the only way to reduce the risk from material failure is through  
8 replacement. In fact, the only way to *eliminate* gas risk from material failure is to  
9 decommission the gas pipe and transition customers to alternative heating systems (new  
10 gas pipes still present some risks, albeit lower than LPP). Repairs can extend the life of an  
11 existing gas pipe until the pipe can be decommissioned with lower-GHG alternatives. This  
12 may be more cost-effective and result in less ratepayer cost than, for example, replacing  
13 LPP with upgraded new pipe.<sup>33</sup> Repairing LPP supports the purpose of the GSEP statute  
14 because it mitigates gas leaks in the short run, minimizes the costs of infrastructure  
15 improvements over the long term when customer alternatives are feasible, and supports the  
16 need to balance accelerated remediation of LPP with the rising cost to ratepayers.

17 **IV. THE LDCs MISCHARACTERIZE THE CONSEQUENCES OF LOWERING THE**  
18 **GSEP CAP.**

19 **Q. Please summarize the LDCs' arguments against lowering the GSEP cap.**

---

<sup>32</sup> *Id.* at 26.

<sup>33</sup> Exh. AG-DL-DM-1, at 32–33 (demonstrating how GSEP investments are likely to become stranded assets).

1 A. The LDCs make the following arguments against lowering the GSEP cap: (1) the  
2 circumstances that supported an increase in the GSEP cap have not changed;<sup>34</sup> (2) increases  
3 in inflation have exacerbated the cost pressure, and revenues have not kept pace with  
4 increasing costs to perform the same work;<sup>35</sup> (3) the LDCs will continue to exceed the cap,  
5 and there will be an ongoing issue of cost deferrals that will accrue interest;<sup>36</sup> (4) lowering  
6 the cap will require an extension of the GSEP timeline;<sup>37</sup> and (5) reducing the cap could  
7 limit the LDCs' ability to incorporate NPAs into their GSEP plans.<sup>38</sup>

8 **Q. Do you agree with the LDCs' assessment of the consequences of lowering the GSEP**  
9 **cap?**

10 A. No. First, we discussed in detail above how circumstances have changed, and the LDCs  
11 must account for these statutory and regulatory changes in their GSEP plans.

12 Second, because costs of replacing LPP with new pipe are rising, it is even more important  
13 to exercise prudence and consider LPP repair and decommissioning. The LDCs state that  
14 the only way to decrease the annual GSEP revenue requirement is to perform less work.<sup>39</sup>  
15 Another way to decrease the annual GSEP revenue requirement is to perform *less costly*  
16 work, e.g., strategic decommissioning, monitoring, and repair. Lowering the GSEP cap

---

<sup>34</sup> Exh. LDC-Rebuttal-1, at 29–30.

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at 31–32.

<sup>37</sup> *Id.*

<sup>38</sup> *Id.* at 33.

<sup>39</sup> Exh. LDC-Rebuttal-1, at 29–30.

1 must occur simultaneously with changes to the LDCs' administration of the GSEP  
2 program.

3 Third, the LDCs' concerns about ongoing cost deferrals are predicated on the assumption  
4 that all LPP should be replaced with new gas pipe. The current and ongoing deferrals of  
5 the amount over the cap are caused in large part by the focus on replacing LPP with new  
6 pipe. Furthermore, LDCs have an obligation to manage spending according to the cap set  
7 by the Department.

8 Fourth, the GSEP timeline should not be extended regardless of the cap. The LDCs argue  
9 that, if the cap is lowered, they will not be able to replace all LPP with new pipe before the  
10 GSEP program is expected to end in in 2034.<sup>40</sup> Here again, the LDCs misconstrue the  
11 purpose of GSEP as a total pipe replacement program regardless of statutory or regulatory  
12 constraints. The LDCs are obligated to comply with the GSEP statute and the terms set by  
13 the Department. In fact, under the GSEP statute, the Department has the authority to  
14 "discontinue the replacement program and require a gas company to refund any costs  
15 charged to customers due to failure to substantially comply with a plan or failure to  
16 reasonably and prudently manage project costs."<sup>41</sup>

17 Finally, the LDCs' assertion that lowering the cap could limit their ability to incorporate  
18 NPAs into their GSEP plans seems unsupported by applicable law and Department Orders.  
19 The Department's Order in D.P.U. 20-80-C requires the LDCs to conduct NPA analysis

---

<sup>40</sup> G.L. c. 164, § 145(c).

<sup>41</sup> G.L. c. 164, § 145(h).

1 regardless of the level of the revenue cap.<sup>42</sup> As discussed in our initial testimony, under the  
2 LDCs' interim NPA processes, the overwhelming majority of GSEP projects were  
3 excluded from NPA analysis despite the 3.0 percent cap.<sup>43</sup> Moreover, in most instances,  
4 LDCs will only incur the costs of decommissioning when a segment of LPP is selected for  
5 NPA replacement. The GSEP statute allows for recovery of costs related to the installation  
6 of thermal infrastructure,<sup>44</sup> but the dominant decarbonization strategy for the  
7 Commonwealth is electrification.<sup>45</sup> The costs of targeted electrification are not recoverable  
8 generally through GSEP's accelerated cost recovery mechanism, therefore,,  
9 decommissioning LPP to allow for NPAs will significantly reduce recoverable GSEP  
10 spending compared to total to pipe replacement. This will help to prevent excessive GSEP  
11 spending over the cap set by the Department.

12 **Q. Should the Department lower the GSEP cap?**

13 A. Yes. As discussed in our direct testimony, the Department should gradually lower the  
14 GSEP cap to the statutory minimum of 1.5 percent.<sup>46</sup> Above, we discussed how the LDCs  
15 should (1) stop replacing all LPP with new gas pipe; (2) limit replacement of LPP to  
16 circumstances where it poses material, immediate risks to system safety and reliability; (3)

---

<sup>42</sup> *Future of Gas*, D.P.U. 20-80-C, Order, at 21 ("The Department did not carve out GSEP or any other project as exempt from the NPA analysis requirement in its Order and we will not do so as a clarification here.").

<sup>43</sup> Exh. AG-DL-DM-1, at 24-26.

<sup>44</sup> G.L. c. 164, § 145(a).

<sup>45</sup> *Future of Gas*, D.P.U. 20-80-C, Order, at 35.

<sup>46</sup> Exh. AG-DL-DM-1, at 48-49; G.L. c. 164, § 145(f).



1 implement a GSEP planning strategy that involves repair and/or decommissioning of LPP  
2 and facilitates the transition to alternative heating systems; and (4) consider and protect  
3 against stranded asset risk of an overbuilt gas distribution system. Lowering the GSEP cap  
4 is consistent with each of these goals.

5 A lower cap requires greater discretion. A 1.5 percent cap would still allow for significant  
6 GSEP investment *and* would require the LDCs to better prioritize the LPP that poses  
7 greater risk to safety and reliability. As the LDCs exercise prudent discretion and upgrade  
8 less pipe, they minimize potential stranded assets, saving ratepayer dollars in the long run.

9 Finally, we recognize that changing the current administration of the GSEP program may  
10 be a significant adjustment for the LDCs given that their 2024 GSEP plans are still largely  
11 business-as-usual pipe replacement plans. To ease the transition to a system more aligned  
12 with the Commonwealth's climate mandates, we recommend gradually lowering the GSEP  
13 cap.

14 **Q. Why should the Department gradually lower the GSEP cap to 1.5 percent?**

15 A. Gradually stepping down the GSEP cap addresses the LDCs concerns regarding excessive  
16 cost deferrals and rate shock.<sup>47</sup> As explained above, the LDCs' concerns about excessive  
17 deferrals are predicated on the assumption that they will continue replacing LPP primarily  
18 with new gas pipe. By implementing GSEP plans that also involve repairs, targeted

---

<sup>47</sup> Exh. LDC-Rebuttal-1, at 30–32.

1 decommissioning, and transitioning to alternative heating systems in the longer term, the  
2 LDCs will reduce expected deferrals.

3 Gradually lowering the cap will allow the LDCs to transition to a GSEP program that  
4 spends less on pipe upgrades. It will also provide the companies with the opportunity to  
5 recover the existing deferral amounts during the transition period. As such, the gradual  
6 step-down from 3.0 percent to 1.5 percent is appropriate to address the LDCs' concerns.

7 **V. THE LDCs MINIMIZE THE SIGNIFICANCE OF THEIR DEPARTURE FROM**  
8 **THE GSEP PLANS.**

9 **Q. The LDCs state that GSEP work requires flexibility and failing to account for**  
10 **changed circumstances to “maintain attention to a static list” would undermine the**  
11 **need to address LPP. Does your testimony suggest that the LDCs should “maintain**  
12 **attention to a static list?”<sup>48</sup>**

13 **A.** No. Our direct testimony does not suggest that the LDCs' must maintain a “static list” of  
14 GSEP projects. We agree that the Department recognizes the need for some flexibility but  
15 emphasize the significance of the LDCs' departure from the approved GSEP plans.<sup>49</sup>  
16 Figure 3 of our direct testimony illustrates the discrepancies between the LDCs' 2023  
17 GSEP plans and their 2024 GSEP reconciliation filings.<sup>50</sup> Over 80 percent of GSEP  
18 projects completed by National Grid had not been reviewed or approved by the  
19 Department,<sup>51</sup> suggesting those new projects were not identified as high-risk or in need of  
20 immediate remediation when the company filed its GSEP plan for approval. Similarly, at

---

48 Exh. LDC-Rebuttal-1, at 20.

49 Exh. AG-DL-DM-3, at 15.

50 *Id.* at 14.

51 *Id.*

1 least 60 percent of the projects completed by Berkshire Gas, EGMA, and NSTAR Gas had  
2 not been reviewed or approved by the Department.<sup>52</sup> The LDCs must demonstrate  
3 “substantial compliance” with their Department-approved GSEP plans in the GREC  
4 filings.<sup>53</sup> Our direct testimony called attention to the fact that the LDCs’ business as usual  
5 approach to the GSEPs does not amount to “substantial compliance” and shows a disregard  
6 for the GSEP regulatory process.<sup>54</sup>

7 **Q. Please summarize the LDCs’ arguments regarding paving moratoriums.**

8 A. The LDCs acknowledge that road paving and paving moratoriums are a significant reason  
9 why GSEP activity departs from the approved GSEP plans. The LDCs explain that, when  
10 a road is paved over LPP, the construction may impact the LPP, and the paving moratorium  
11 will prevent GSEP work for a 5-year period, absent an emergency.<sup>55</sup> As a result, a known  
12 risk to safety and reliability could end up staying in the ground for 5 more years.

13 **Q. Do you agree with the LDCs’ arguments regarding paving moratoriums?**

14 A. The LDCs have not presenting convincing evidence that an upcoming paving moratorium  
15 that might limit the replacement timing for a particular section of LPP necessarily presents  
16 a safety risk that would require accelerating the replacement of that LPP. Accelerating  
17 replacement of that LPP may effectively prevent it from undergoing a decommissioning

---

<sup>52</sup> *Id.*

<sup>53</sup> G.L. c. 164, § 145(f).

<sup>54</sup> Exh. AG-DL-DM-1, at 13.

<sup>55</sup> Exh. LDC-Rebuttal-1, at 22.

1 review, avoid a full NPA review, and defer other Department-approved GSEP projects that  
2 may have a higher risk priority.

3 The LDCs aim to take advantage of existing roadwork because paving is costly. Here again,  
4 we observe that the LDCs operate as if all LPP should be upgraded with new gas pipe. If  
5 that were true, it might make sense to coordinate with paving schedules to save costs. But,  
6 if the Department concludes that the LDCs must shift away from total LPP replacement, it  
7 no longer makes sense to automatically reschedule GSEP projects in response to upcoming  
8 paving moratoriums without a more in-depth examination of where decommissioning and  
9 alternative heating systems are feasible in the short and long run.

10 Segments of LPP that are subject to upcoming paving moratoriums should be candidates  
11 for decommissioning and transitioning to alternative heating systems. In many instances,  
12 decommissioning LPP and transitioning customers may involve less road disruption and  
13 may be able to proceed even in the presence of a paving moratorium, unlike pipe  
14 replacement work.

15 **VI. THE LDCs MISCONSTRUE THE REQUIREMENTS OF THE DIMPs.**

16 **Q. Please summarize the LDCs' arguments regarding the Distribution Integrity**  
17 **Management Plans "DIMPs".**

18 **A.** The LDCs argue that their respective DIMPs prevent them from considering NPAs in some  
19 cases because "some segments of LPP will have high risk scores that require replacement  
20 within a time period that does not allow for consideration of an NPA to ensure system

1 safety in accordance with each LDCs' [DIMP]."<sup>56</sup> Moreover, the LDCs state that GSEP  
2 projects are intended to "implement each LDCs' DIMP in a manner that does not always  
3 allow for deferral to allow for development of an NPA. Therefore, it is not a flaw of the  
4 analysis that an NPA would not be appropriate for a GSEP project."<sup>57</sup> Here, the LDCs  
5 appear to suggest that the DIMPs mandate replacement of LPP with new gas pipe. For  
6 example, National Grid states that its "DIMP obligates the Company to replace LPP to  
7 mitigate risk on the gas system."<sup>58</sup>

8 **Q. Do you agree with the LDCs' arguments?**

9 A. We agree that the DIMP rules, 49 C.F.R. §§ 192.1001 through 192.101 ("Part 192"),  
10 obligate LDCs to identify threats to system safety, evaluate and rank risk, and prioritize  
11 remediation of the greatest risks, which may involve replacement.<sup>59</sup> We disagree, however,  
12 with the LDCs' assertion that the DIMPs are an obstacle to decommissioning or NPAs.  
13 After reviewing the DIMPs provided in discovery, we conclude that the DIMPs do not  
14 obligate the LDCs to replace all LPP with new pipe. In fact, GSEP activity frequently  
15 exceeds the requirements of the DIMPs.

16 Part 192 requires the LDCs to develop an integrity management plan with the following  
17 elements: (a) knowledge of threats; (b) identification of threats; (c) evaluation and ranking  
18 of risk; (d) identification and implementation of measures to address risks; (e) measure

---

<sup>56</sup> Exh. LDC-Rebuttal-1, at 13, 44.

<sup>57</sup> *Id.* at 25.

<sup>58</sup> *National Grid*, D.P.U. 24-GSEP-03, Exh. NG-GPP-1, at 10.

<sup>59</sup> Exh. AG-DL-DM-1, at 49.

1 performance, monitor results, and evaluate effectiveness; (f) periodic evaluation and  
2 improvement; and (g) report results.<sup>60</sup> Part 192 does not mandate that all LPP be replaced  
3 with new pipe. According to National Grid’s DIMP, “Due to the significant diversity  
4 among distribution pipeline operators and pipelines, the [Part 192] requirements are high-  
5 level and performance-based. [Part 192] specifies the required program elements but does  
6 not prescribe specific methods of implementation.”<sup>61</sup>

7 Unitil, EGMA, and NSTAR Gas acknowledge that accelerated replacement of LPP exceeds  
8 the requirements of Part 192. Unitil’s DIMP categorizes GSEP “replacement of aging pipe  
9 infrastructure” under “Accelerated Actions beyond the minimum code requirements  
10 specified by Part 192 Subpart P.”<sup>62</sup> Similarly, EGMA and NSTAR Gas characterize GSEP  
11 activity as “Additional or Accelerated Actions Beyond Part 192 Requirements.”<sup>63</sup> In fact,  
12 in Table D4, the Companies provide side-by-side comparisons of the existing mitigation  
13 requirements of their Operating and Maintenance Plan Procedures and the actions “Beyond  
14 Part 192.”<sup>64</sup> For example, the sub-threat of cast iron pipe requires the following “existing  
15 mitigation” activity:

16 OM – 160 – ADM requires that each segment on which corrosion such as  
17 general graphitization is found to a degree where a fracture in the pipe is soft  
18 and able to be shaved away with a knife or any leakage might result. The pipe

---

<sup>60</sup> *Id.*; 49 C.F.R. § 192.1007.

<sup>61</sup> *National Grid*, D.P.U. 24-GSEP-03, Exh. NG-GPP-14, at 13.

<sup>62</sup> *Unitil*, D.P.U. 24-GSEP-01, Exh. Unitil-RKCL-5, Att. A, at 99 (Table 6.4), 95.

<sup>63</sup> *EGMA*, D.P.U. 24-GSEP-05, Exh. DPU-3-4, Att. DPU-3-4, at 162–63; *NSTAR Gas*, D.P.U. 24-GSEP-06, Exh. SC-1-1, Att. SC-1-1, at 159–160.

<sup>64</sup> *Id.*

1           shall be replaced, repaired, or sealed by internal sealing methods adequate to  
2           prevent or arrest any leakage.<sup>65</sup>

3           Under “Additional or Accelerated Actions Beyond Part 192 Requirements” for cast iron,  
4           the Companies state they are “currently conducting an accelerated cast iron replacement  
5           program that anticipates replacement of all cast iron mains and services by the end of 2029  
6           for Yankee and 2034 for NSTAR,” referring to the GSEP program.<sup>66</sup> This demonstrates  
7           that total replacement of LPP is not required by the federal DIMP rules. Part 192 allows  
8           the LDCs to address threats by monitoring and repairing LPP (or decommissioning) where  
9           appropriate. We therefore disagree with the LDCs’ testimony to the extent it implies that  
10          the DIMPs have rigid requirements that create obstacles to NPA analysis and other non-  
11          pipe solutions such as targeted electrification. In reality, the changes to GSEP—including  
12          more meaningful NPA analysis, and the need for compliance with Chapter 21N sublimits—  
13          should be incorporated into the DIMPs or implemented in parallel with DIMPs, so long as  
14          the LDCs are prioritizing remediation to address the greatest risks, which can involve  
15          repair, replacement, or decommissioning.

16          Because the LDC argue that the “only way to reduce the risk from material failure is  
17          through replacement,”<sup>67</sup> we observe the obvious: decommissioning would not only reduce  
18          the risk as well but would fully eliminate the risk for the decommissioned gas plant and be  
19          consistent with DIMP rules.

---

<sup>65</sup>       *Id.*

<sup>66</sup>       *Id.*

<sup>67</sup>       Exh. LDC-Rebuttal-1, at 33.

**VII. THE LDCs INCORRECTLY STATE THAT INTERGRATED ENERGY PLANNING (“IEP”) IS BEYOND THE SCOPE OF THIS PROCEEDING.**

**Q. Please summarize the LDCs’ response to your IEP arguments.**

A. The LDCs advance the following arguments regarding IEP in response to our direct testimony: (1) IEP is beyond the scope of the GSEP proceedings;<sup>68</sup> (2) Because the Commonwealth is in the early stages of the energy transition, proactive outreach and assistance to move customers off gas is premature;<sup>69</sup> (3) Our IEP recommendations would limit GSEP and, therefore, undermine the LDC’s ability to meet the Commonwealth’s Scope 1 emissions mandates;<sup>70</sup> and (4) the Climate Compliance Plans (“CCPs”) are the proper venue for discussing IEP.

**Q. Do you agree with the LDCs’ arguments regarding IEP?**

A. No. First, IEP is squarely within the scope of the GSEP proceedings. Our direct testimony defined IEP as a process that considers overall building energy requirements and decarbonized options for meeting them.<sup>71</sup> As the Commonwealth strives to meet its climate-focused mandates, IEP must be an integral part of *all* gas system planning and investment. GSEP—the capital investment tool used by the LDCs to upgrade aging gas infrastructure—does not exist in a vacuum. That is, the LDCs’ approach to GSEP must be reframed through the lens of IEP, which is centered around a vision of electrification as the primary pathway for meeting the Commonwealth’s GHG mandates for both the buildings

---

<sup>68</sup> *Id.* at 33–34.

<sup>69</sup> *Id.* at 34.

<sup>70</sup> *Id.* at 35–36.

<sup>71</sup> Exh. AG-DL-DM-1, at 50.



1 sector and the distribution sector.<sup>72</sup> As part of IEP, each LDCs' LPP inventory and GSEP  
2 plans should be reconsidered in the context of targeted electrification planning.  
3 Electrification, in areas with LPP, coordinated with the GSEP plans should produce  
4 ratepayer savings because it can avoid costly investment in a gas distribution system that  
5 will likely become redundant over the coming decades, well before the end of its  
6 engineering life. Further, coordinating electrification with GSEP reduces Scope 1  
7 emissions by enabling LPP decommissioning, and importantly, also reduces the much  
8 higher Scope 3 emissions by reducing gas combustion. As long as the GSEP program  
9 continues, it should be carefully coordinated with the IEP planning process.

10 Second, proactive outreach to customers is not premature. The legislative and policy  
11 changes discussed in our direct testimony, including the 2024 GSEP amendments, leave  
12 little doubt that customer outreach regarding options to natural gas usage is timely.<sup>73</sup> In  
13 fact, informing customers about non-gas heating and appliances can help prevent stranded  
14 asset risk on both the customer side and the gas system side, saving ratepayers money as  
15 the energy transition accelerates.

16 Third, our IEP recommendations would not undermine the LDCs' ability to meet Scope 1  
17 emissions mandates. As noted above, electrifying customers and decommissioning LPP

---

<sup>72</sup> *Id.* at 51; *Future of Gas*, D.P.U. 20-80-B, Order, at 35 (stating that the Commonwealth's dominant building decarbonization strategy is electrification).

<sup>73</sup> *Id.* at 16–19.

1 reduces Scope 1 emissions more than pipe replacement, and it also reduces the much larger  
2 Scope 3 emissions caused by customer end-use of gas.

3 Finally, the LDCs claim that IEP considerations are better suited for the CCPs, which will  
4 “address how they will contribute to the reduction of Scope 1 emissions and Scope 3  
5 emissions (through energy efficiency).”<sup>74</sup> The CCPs, however, do not exist independent of  
6 the GSEP process. On the contrary, the goals set forth in the CCPs should include a  
7 reduction in natural gas infrastructure investment through GSEP (as well as other gas  
8 system investment programs). From a customer cost perspective, it does not made sense to  
9 continue years of accelerated reinvestments in a gas system that will inevitably experience  
10 declining utilization and likely decommissioning, at least in part, over the upcoming  
11 decades. The LDCs “maintain that the objectives of IEP cannot be resolved in these limited  
12 GSEP dockets;”<sup>75</sup> Our point is not that the GSEP dockets should resolve all the issues  
13 relevant to IEP, but even if the full IEP process is not yet implemented by the LDCs, it is  
14 not premature to begin customer outreach and coordinate GSEP plans with targeted  
15 electrification efforts.

16 Furthermore, it is interesting that the LDCs seek to limit their obligation to limit Scope 3  
17 emissions only “through energy efficiency.” The LDCs appear to minimize their role and  
18 responsibility for reducing the emissions resulting from natural gas combustion at the point  
19 of use. The LDCs’ obligation to reduce Scope 3 emissions extends far beyond Mass Save

---

<sup>74</sup> Exh. LDC-Rebuttal-1, at 33.

<sup>75</sup> Exh. LDC-Rebuttal-1, at 34–35.

1 efficiency programs. The natural gas limits and sublimits for the buildings sector, as well  
2 as the Department's D.P.U. 20-80-C Order, require LDCs to consider how natural gas  
3 throughput contributes to GHG emissions.<sup>76</sup>

4 Contrary to the LDC joint position, LDC responsibility to address both Scope 1 and Scope  
5 3 emissions is critical within the GSEP program because widespread upgrading of natural  
6 gas infrastructure through GSEP serves to entrench the use of natural gas, potentially  
7 perpetuating Scope 3 emissions and certainly incurring additional costs. There are elements  
8 of IEP such as planning for decommissioning and customer outreach that can be  
9 implemented immediately. IEP requires the LDCs to consider ways to adapt their GSEP  
10 programs and capital investments, as well as the rest of their operations, to dramatically  
11 reduced gas use, which must occur to meet the Commonwealth's GHG reduction mandates,  
12 and to do so in ways that keep customer costs reasonable.

13 **Q. Does this conclude your testimony?**

14 **A. Yes.**

---

<sup>76</sup> *Future of Gas*, D.P.U. 20-80-C, Order, at 29–31 (affirming that LDCs are required to measure and report Scope 3 emissions); *See also* EEA, Clean Energy and Climate Plan for 2025 and 2030, at 52 (Jun. 30, 2022), available at: <https://www.mass.gov/doc/clean-energy-and-climate-plan-for-2025-and-2030/download> (The 2025 and 2030 CECP adopted by EEA mandates that the building sector achieve at least a 47 percent reduction from 1990 GHG emission levels by 2030 and a 93 percent reduction by 2050.)