STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 1

DeCourcey and Therrien

1. Refer to page 10, lines 13-17 of the direct testimony of Matthew DeCourcey and Gregg Therrien, regarding characterization of the Multi-Year Rate Plan (MYRP) as a pilot program.
    a. What are the intended benefits of the MYRP?
    b. What metrics will the Company track to demonstrate whether the intended benefits are achieved?
    c. What sections of Liberty's Filing describe how this pilot should be evaluated?
    d. What should the criteria for a successful pilot be?
    e. How will the Company evaluate whether the MYRP created benefits to customer and to Liberty over a traditional rate case filing at the end of the MYRP Term?
    f. What metrics will the Company use to evaluate whether the MYRP created benefits to itself and to its customers compared to a traditional rate case filing.
2. Refer to page 5, lines 7-8 of the direct testimony of Matthew DeCourcey and Gregg Therrien and explain the difference between the Company's current stair-step approach and its proposal for the Commission to "authorize distributions rates for three one-year periods beginning in July 2023 based on forward-looking estimates of its COS for each of the three years."
3. Refer to page 12, lines 3-4 of the direct testimony of Matthew DeCourcey and Gregg Therrien and explain how the MYRP will encourage Liberty to achieve cost efficiencies if actual costs are allowed to vary from those in the approved capital plan, within allowed tolerances.
4. Refer to page 17, line 2 of the direct testimony of Matthew DeCourcey and Gregg Therrien and define what is meant by "outside management's control."
5. Did Liberty consider utilizing a tracker for variations in the cost of capital projects that lie outside management's control? Please explain why or why not.

6. Refer to page 17 of the direct testimony of Matthew DeCourcey and Gregg Therrien regarding capital steps.
    a. Please explain how the proposed annual reconciliation of costs in the MYRP provides a greater incentive to the Company to control costs than the use of rates steps that are not recovered until the conclusion of a case.
    b. Please explain how the proposed annual reconciliation filing reduces regulatory burden over using capital steps.

7. Refer to page 18, lines 10-11 of the direct testimony of Matthew DeCourcey and Gregg Therrien and explain whether there is a cost limit for variances that are eligible to be deferred.

8. Refer to the statement on pages 19 and 20 of the direct testimony of Matthew DeCourcey and Gregg Therrien, that "customers are protected from overspending by the limitations placed on spending for Replacement Project and by the prudency review."
    a. Is the Company currently subject to after-the-fact prudency review of its capital projects? If yes, please explain how this is different from the MYRP. If not, please explain why not.
    b. How many times over the last ten years has the Commission determined a Company investment was imprudent?
    c. Please provide the decisions and page references for instances when the Commission found Liberty had imprudently incurred costs, and costs were disallowed, over the last 10 years.

9. Refer to the statement on page 21, lines 5-7 of the direct testimony of Matthew DeCourcey and Gregg Therrien, which states "the upward adjustment to rate base cannot exceed 20% for any individual specific project or 10% of the total change in UPIS for any RY."
    a. Please explain how the Company developed the 20% and 10% limit and provide all workpapers in Excel with formulae instance and any supporting sources.
    b. What occurs currently when Liberty spends more than its proposed capital plan?

10. Refer to the statement on page 26 of the direct testimony of Matthew DeCourcey and Gregg Therrien, which states: "at the time the Company made its reconciliation filing following the end of RY3, the Company could request to recover some, or all, of the deferred revenues.
    a. Please confirm that this proposal allows Liberty to true up its costs to revenues. If not confirmed, please explain why not.
    b. Please explain how this proposal differs from the currently approved rate step methodology.

11. Refer to page 28, lines 10-15 of the direct testimony of Matthew DeCourcey and Gregg Therrien and explain how the creation of an evidentiary proceeding on recovery of deferred revenues reduces regulatory burden over the status quo.

12. Refer to pages 33-35 of the direct testimony of Matthew DeCourcey and Gregg Therrien regarding the proposed earnings sharing mechanism (ESM).

    a. Please list the factors that would contribute to Liberty earning less than its authorized return on equity (ROE).

    b. Please list the factors that would contribute to Liberty earning more than its authorized ROE.

    c. Please explain why customers should bear the majority of the costs (75%) of Liberty's earnings fall more than 200 bps below the ROE.

    d. Do customers bear the costs associated with Liberty underearning under its current rate step methodology? Please explain why or why not?

    e. How does the Company recover underearning's currently?

    f. Did Liberty estimate the potential customer rate impacts from its proposed ESM for each year of the MYRP? If yes, please provide those results and the underlying workbooks in Excel readable format with formulae intact. If not, please explain why not.

    g. How will the Company incorporate performance incentive mechanisms (PIM) rewards and/or penalties into its determination of the annual ESM?

    h. Explain how Liberty determined to set its proposed ROE deadband at 100 basis points on either side of the allowed ROE. Provide references for other jurisdictions that use a similar 100 basis point deadband in their MYRP or Performance Based Ratemaking mechanisms.

13. Provide the dollar value equivalent of a basis point for each of the years covered by the proposed MYRP. Provide all underlying calculations in spreadsheet format with any formulas used in these calculations intact.

14. Provide copies of all presentations that have been made to the Company board of directors and/or parent company executives related to the proposed MYRP and any previous presentations related to the development of this proposal. Provide both the slideshow file (in Powerpoint or pdf form) and any handouts or associated materials.

<u>Hanser</u>

15. Refer to pages 3-4 of the direct testimony of Philip Hanser, which states: "For example, multiyear rate plans provide utilities with a broad-based incentive framework by extending the period between rate cases. As a result, the multiyear framework incentivizes the utility to achieve cost efficiencies because it will be able to retain a portion of any enhanced earnings until the time of the next rate case." Please explain how Liberty's proposed MYRP promotes cost efficiencies if it is permitted to reconcile costs on an annual basis.

16. Refer to page 6, lines 15-16 of the direct testimony of Philip Hanser.

    a. Please provide a list of all U.S utilities that adjust rates using the I-X approach. Please include in your response the docket or proceeding number where each utility received approval.

    b. Please explain why the Company did not propose an I-X approach.

    c. Did Liberty consider escalating its historical test year revenue requirement according to an inflation index, such as the gross domestic product price index (GDP-PI) less a productivity factor? Please explain why or why not?

17. Refer to footnote 8 on page 9 of the direct testimony of Philip Hanser and indicate which of the utilities have annual reconciliations for under-earnings. Please provide the docket or proceeding number where each utility received approval.

18. Refer to page 9, lines 5-10 of the direct testimony of Philip Hanser regarding annual adjustments in MYRPs.

    a. Please provide a list of all known utility MYRPs that include annual reconciliation of under-earnings. Please provide the docket or proceeding number where each utility received approval.

    b. Please provide a list of all known utility MYRPs that include the reconciliation of under-earnings only at the conclusion of the MYRP period. Please provide the docket or proceeding number where each utility received approval.

    c. Please provide a list of all known utility MYRPs that do not permit annual reconciliation of under-earnings. Please provide the docket or proceeding number where each utility received approval.

19. Refer to page 10, lines 8-14 of the direct testimony of Philip Hanser regarding "earnings sharing."

    d. Please provide a list of all known utility MYRPs that include ESMs for under-earnings. Please provide the docket or proceeding number where each utility received approval.

    e. Please explain why customers should bear the risk of utility under-earnings.

    f. Please explain why an ESM is needed in addition to the Company's proposal for an annual reconciliation of costs.

20. Refer to the statement on page 11, lines 5-6 of the direct testimony of Philip Hanser, which states: "'Formula rate' plans include full (or nearly full) true-up provisions." Please explain how Liberty's proposal to reconcile costs on an annual basis is different than a "formula rate" plan.

21. Refer to page 11 of the direct testimony of Philip Hanser.

    a. Please provide a list of all known utility MYRPs that include an ESM similar to that proposed by Liberty. Please provide the docket or proceeding number where each utility received approval.

b. Did the Company model its ESM on another jurisdiction's MYRP? If yes, please provide the name of the utility and the associated docket or proceeding number.

c. Please explain why customers should bear the majority of the costs (75%) of Liberty's earnings fall more than 200 bps below the ROE.

22. Refer to page 12, lines 17-18 of the direct testimony of Philip Hanser, which states that "capital is forecast for RY2 and RY3 based on capital spend plans, and O&M is forecasted based on an escalation factor." Please explain how this approach differs from the current stair-step approach.

23. Refer to page 14, lines 4-7 of the direct testimony of Philip Hanser and explain how setting rates on utility-specific forecasts with an ESM provides more incentives for cost control than setting rates based on an external index or I-X approach with an ESM.

24. Refer to page 14, lines 8-10 of the direct testimony of Philip Hanser and explain how Liberty's MYRP leads to more gradual and deterministic rate increases compared to the current step adjustment methodology.

25. Refer to page 15, lines 19-21 of the direct testimony of Philip Hanser.

    a. Does "specific capital projects" indicate that utilities were not allowed adjustments for replacement projects or projects that were not previously identified in the capital plan? Please explain your response.

    b. How are changes to the capital plan addressed in the current step adjustment methodology? Please explain for both the removal of capital and additional capital.

26. Refer to the direct testimony of Philip Hanser on page 16, lines 12-13 that states "under the MYRP, the sum of the value of replacement projects is required to exceed the value of the canceled projects." Please also refer to the direct testimony of Matthew DeCourcey and Gregg Therrien on page 19, lines 9-10 that states that "In either case, the total value of the Replacement Project(s) cannot be greater than the previously approved capital projects they are replacement."

    Please confirm that the total value of replacement projects must be lower than the initial projects they are replacing as included in the direct testimony of Matthew DeCourcey and Gregg Therrien and that the statement by witness Philip Hanser is an error. If not confirmed, please explain the discrepancy.

27. Refer to page 22, line 13 and page 23, lines 1-2 of the direct testimony of Philip Hanser and explain why reliability and resilience are more important to consumers than they were previously. Please include a list of all sources relied upon in making this determination.

28. Refer to page 22, lines 1-5 of the direct testimony of Philip Hanser.

    a. Did the Company calculate the incremental net benefits that accrue to customers from meeting the proposed higher performance levels for System Average Interruption Frequency Index (SAIFI) and System Average Interruption Duration Index (SAIDI)? If yes, provide the value of the net incremental benefits to customers and include all supporting workpapers in Excel with formulae intact.

b. What are the costs (i.e., reliability investments) associated with achieving higher levels of SAIDI and SAIFI, and have these costs been incorporated in the proposed MYRP?

29. Refer to page 26, lines 12-14 of the direct testimony of Philip Hanser and explain how sharing percentages are "skewed to the benefit of customers" if Liberty "treats the relative risk of over- and under-earning symmetrically" as stated on page 12 lines, 7-8.

30. Refer to page 26, lines 11-12 of the direct testimony of Philip Hanser and explain how the MYRP provides more "transparency concerning utility capital and O&M forecasts" than the Company's current approach.

Erica Menard

31. Refer to page 11, lines 5-7 of the direct testimony of Erica Menard and list potential unintended consequences the Company seeks to avoid.

32. Refer to the direct testimony of Erica Menard at page 18, lines 13-22 regarding the proposed reliability PIM.

    a. Is Liberty currently subject to reliability standards for SAIDI and SAIFI? If yes, please provide those standards and the associated performance requirements.

    b. Is Liberty subject to any penalties currently related to SAIDI and SAIFI performance? Please explain.

    c. What obligations does Liberty currently have to increase reliability?

    d. Does Liberty have any corporate goals related to SAIDI and SAIFI performance? If yes, please provide the performance targets for each year between 2017 and 2021 and how actual performance compared to those targets.

    e. In the absence of the PIM, what percentage increase in SAIDI and SAIFI performance would Liberty achieve each year of the MYRP?

33. Refer to the direct testimony of Erica Menard at page 16, lines 2-7. Did Liberty consider taking the mean of peer utility SAIDI and SAIFI values and setting the reward/penalty at one standard deviation above or below the mean? If no, please explain why not. If yes, why did Liberty choose not to propose that method?

34. Did the Company consider a reliability PIM related to feeders with below average levels of reliability? Please explain why or why not.

35. Please explain why the Company did not propose a PIM related to Customers Experiencing Multiple Interruptions as included in Attachment ELM-PBR-1.

36. Refer to the direct testimony of Erica Menard on page 14, lines 2-3 and 9-13 that discusses the selection of utilities for reliability data.

a. Please provide a list of utilities that were initially considered but ultimately not selected due to differences in "regional conditions" and "exogenous seasonal weather affects."

b. Were the "regional conditions that affect reliability" and "exogenous seasonal weather affects" measured for the utilities located further away and selected based on a selection criterion? If not, describe the assessment process for determining utility inclusion based on these criteria.

37. Refer to page 15, lines 7-10 of the direct testimony of Erica Menard.

    a. Why is a PIM required for SAIFI if the Company has a strong score?

    b. Would the Company not maintain a strong SAIFI score absent of the PIM? Please explain why or why not.

    c. Would the Company seek to improve its SAIDI score in the absence of the PIM? Please explain why or why not.

38. Did the Company conduct a benefit cost analysis (BCA) to determine the cost-effectiveness of outperforming industry standards for SAIDI and SAIFI? If yes, please provide all workpapers in Excel with formulae intact. If not, please explain why not.

39. Did the Company conduct a benefit cost analysis (BCA) of its proposed time-of-use (TOU) Rate Adoption PIM? If yes, please provide all workpapers in Excel with formulae intact. If not, explain why not.

40. Refer to page 25, lines 1-11 of the direct testimony of Erica Menard regarding the Interconnect PIM.

    a. Did the Company calculate the incremental net benefits that accrue to customers from shortening the existing 40-day time to complete Supplemental Reviews? If yes, provide the value of the net incremental benefits to customers and include all supporting workpapers in Excel with formulae intact.

    b. What are the costs associated with shortening the time required to complete Supplemental Reviews, and have these costs been incorporated in the proposed MYRP?

    c. Please provide the Company's average time to process Supplemental Reviews for each of the previous five years.

41. Refer to page 28, lines 13-14 of the direct testimony of Erica Menard. For each PIM listed in Attachment ELM-PBR-1 that the Company deemed "duplicative," please provide the name of the report where data is reported, where each report is filed, and available weblinks to the location of each report.

42. Refer to page 31, lines 15-17 of the direct testimony of Erica Menard regarding non-wires alternatives (NWAs)

    a. Please explain why the Company is not proposing any NWAs in its MYRP.

b. Are there barriers in place that prohibit the Company from proposing NWAs in the MYRP?

c. Does the Company have a disincentive to pursue NWAs?

43. Regarding the penalty/reward structure for the reliability PIM:

    a. Identify and provide the risk and reward analysis used to select +/-25 basis points reward/penalty ROE adjustments for meeting or not meeting the reliability PIMs.

    b. Identify and provide a list of all peer utilities that have implemented similar reliability PIMs. Include in your response for each, the level of penalty and reward used for the ROE adjustment.

44. Please explain why the Company did not include metrics for Reliability and Resilience as included Attachment ELM-PBR-1 in its MYRP.

45. Regarding the TOU Rate Adoption PIM:

    a. Please provide the proposed basis point reward for the TOU Rate Adoption PIM.

    b. How did the Company determine the basis point reward level? Please provide any supporting workpapers in Excel with formulae intact.

    c. Identify and provide a list of all peer utilities that have implemented similar TOU PIMs. Include in your response for each, the level of reward used for the ROE adjustment.

46. Regarding the Interconnect PIM:

    a. Please provide the proposed basis point reward for the Interconnect PIM.

    b. How did the Company determine the basis point reward level? Please provide any supporting workpapers in Excel with formulae intact.

    c. Identify and provide a list of all peer utilities that have implemented similar interconnection PIMs. Include in your response for each, the level of reward used for the ROE adjustment.

47. Did the Company calculate the ratepayer impacts of its proposed PIM? If yes, please provide a copy of the analysis in Excel format with formulae intact. If no, please explain why not.

48. Did the Company consider proposing performance metrics with rewards based on a portion of net benefits (i.e., shared savings)? If so, please describe any such metrics that Liberty considered, and please explain why the Company opted not to include any such mechanisms in its proposal. If not, why not?

49. Regarding the metric related to Third-Party Developer Data Access as included in Attachment ELM-PBR-1, please explain whether third-party developers of distributed energy resources currently have access to granular feeder and substation performance data (i.e., 8760 load profiles, voltage sag, power quality, etc.).

Greg Tillman

50. Refer to page 12 of the direct testimony of Greg Tillman and explain if the meters used for the TOU rate option will need to be replaced by the proposed AMI meters? If yes, what are the costs associated with the meters for the TOU rate option.

51. Refer to the direct testimony of Greg Tillman at page 14, Figure 3. Customer Education Plan Tactics and Budget:

    a. Describe the process used to allocate the Budget between the different Communication Tactics.

    b. Clarify if "All NH Electric Customers" is referring to all customers in Liberty's service territory or for all customers over the entire state.

52. Refer to page 5 of the direct testimony of Greg Tillman, where reference is made to the Company's Advanced Rate Design Roadmap. Please provide a copy of this roadmap.

53. Refer to page 5 of the direct testimony of Greg Tillman, where Mr. Tillman states concerning the rate design proposals that he has put forward in this testimony, "they are not the entirety of the Company's plan for rate design innovation in New Hampshire."

    a. Please detail the other elements included in the Company's plan for rate design innovation in New Hampshire that have not been proposed in this proceeding.

    b. Is the Company's Advanced Rate Design Roadmap comprehensive of all of the Company's future plans for rate design innovation in New Hampshire? Please explain.

54. Refer to pages 12-13 of the direct testimony of Greg Tillman, where Mr. Tillman discusses the Company's plans for implementing TOU rates in advance of full AMI deployment, and specifically, to the following response from Mr. Tillman:

    > "The Company plans to utilize meters capable of and programmed to measure the consumption of energy during the time periods defined in the proposed rates. Since these time periods are consistent with the existing EV charging rates and the Battery Storage Pilot, the same metering and billing solutions for those rates will apply to the solutions required for support of the full requirements TOU rates being proposed by Liberty."

    a. Please clarify the type of meters that is referenced in the cited section. Are these interval meters? How do they differ from the AMI meters that this Company intends to install?

    b. Please clarify what is meant by the phrase "metering and billing solutions."

    c. Why is it important that the time periods for the proposed TOU rate are consistent with existing EV charging rates and the Battery Storage Pilot?

55. Refer to page 9 of the direct testimony of Greg Tillman, where Mr. Tillman provides a summary of Commission Staff's proposal on EV TOU rates and the Commission's decision on the same in

Docket No. IR 20-004, and where Mr. Tillman indicates that the Company designed its TOU rate proposal in the instant proceeding to conform to the Commission's guidance in that previous case. Did the Company consider the applicability of the Commission's guidance in Docket No. IR 20-004 to the instant proceeding in light of the fact that the Commission guidance concerned the design of rates for EV whereas the instant proceeding concerns a whole-house rate design? Please explain in detail.

56. Refer to pages 10-11 of the direct testimony of Greg Tillman, where Mr. Tillman discusses the Company's experience deploying the "Time Choice Plus" TOU rate to its Missouri residential and small commercial customers.

    a. Please discuss any differences between the proposed design for the D-TOU and G-3-TOU in New Hampshire and the design of Time Choice Plus.

    b. Has Time Choice Plus been opened to all residential and small commercial customers? Is enrolment opt-out or opt-in?

    c. How much of a reduction in peak period energy consumption have customers enrolled in Time Choice Plus exhibited?

    d. What percentage of eligible residential customers are enrolled in Time Choice Plus?

    e. What percentage of eligible small commercial customers are enrolled in Time Choice Plus?

    f. Does Time Choice Plus include bill protection for newly enrolled customers? If so, please explain how this bill protection works, and please provide data on the number of customers that have benefited from this bill protection and the value of bill protection (in dollars) provided.

57. Refer to page 14 of the direct testimony of Greg Tillman and the discussion of the "Best-Bill Guarantee."

    a. How would the Best Bill Guarantee be funded?

    b. Does the Company believe that offering bill protection will affect the behavioral response of customers enrolled in TOU rates, for example, by reducing the degree of load shifting? Please explain in detail.

58. Refer to page 18 of the direct testimony of Greg Tillman, where Mr. Tillman explains how the Company determined the generation costs to be recovered through the proposed TOU rates and states: "Once the total generation cost is calculated, the TOU rates associated with recovery of generation costs can be determined based on how these costs are incurred in each of the TOU periods."

    a. Is it possible that the TOU rate would under-recover generation supply and/or generation capacity costs if enrolled customers shifted their consumption to off-peak periods? Please explain.

b. If the answer to (a) is yes, then how would the Company recovery any such revenue shortfall?

59. Refer to page 22 of the direct testimony of Greg Tillman, where Mr. Tillman explains that the proposed TOU rates could result in cross-subsidies or lost revenues.

    a. Please explain in detail how TOU rates might result in cross-subsidies.

    b. Please explain how the Company would cover lost revenues, should these result from the proposed TOU rates.

60. Refer to page 25 of the direct testimony of Greg Tillman, where Mr. Tillman states that "customers who choose a competitive supplier must seek access to time-differentiated energy service rates through their selected energy service provider."

    a. Please confirm that the Company is proposing to require that TOU-enrolled customers interested in contracting for supply on the competitive retail market only be permitted to contract for time-differentiated energy service.

    b. If (a) is confirmed, please explain why the Company is proposing to impose this condition.

61. Refer to page 15 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that the Company intends to create separate rate classes for the TOU classes in the future.

    a. When does the Company expect to create separate rate classes for TOU customers?

    b. Please clarify whether the Company intends to create separate customer classes for TOU enrolled customers.

    c. What would be the implications for cost allocation, if any, of creating separate rate classes for TOU customers as the Company proposes to do.

    d. What are the benefits of creating separate rate classes for TOU customers?

    e. What, if any, are the drawbacks of creating separate rate classes for TOU customers?

62. Refer to page 16 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that, "[t]o ensure continuity and simplification of the proposed rates," the Company determined to maintain the time periods used for its EV and battery TOU rates in its proposals for D-TOU and G-3-TOU. Please explain how the time periods were determined for the EV and battery TOU rates and provide all supporting data and documentation illustrating the basis for these time periods.

63. Refer to pages 16 of the direct testimony of Greg Tillman, where Mr. Tillman discusses the development of time periods for D-TOU and G-3-TOU and states, "Liberty gathered and reviewed historical load and ISO – New England ("ISO-NE") locational marginal pricing ("LMP") data to ensure that the time periods were established to ensure effective TOU rates."

a. Do the proposed time periods for D-TOU and G-3-TOU more closely reflect the temporal pattern of energy and/or generation capacity costs more than the temporal pattern of transmission costs? Please explain in detail.

b. Do the proposed time periods for D-TOU and G-3-TOU more closely reflect the temporal pattern of energy and/or generation capacity costs more than the temporal pattern of distribution costs? Please explain in detail.

c. Has the Company performed any specific quantitative or qualitative analysis of LMP pricing data to support its proposed time periods for D-TOU and G-3-TOU? If yes, please provide documentation for this analysis.

d. Has the Company performed any specific quantitative or qualitative analysis of the temporality of transmission pricing to support its proposed time periods for D-TOU and G-3-TOU? If yes, please provide documentation for this analysis.

64. Refer to page 32 of the direct testimony of Greg Tillman, where Mr. Tillman indicates concerning distribution rates that the Company utilized "the ratio of the square of the hourly loads to differentiate the rates by time periods." Please provide workpapers for these calculations for each of the proposed TOU rates.

65. Refer to page 16 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that, "[t]o ensure continuity and simplification of the proposed rates," the Company determined to maintain the time periods used for its EV and battery TOU rates in its proposals for D-TOU and G-3-TOU.

    a. Please explain how maintaining the time periods from the Company's existing TOU rates for EVs and batteries will promote continuity and simplification, and for whom.

    b. Did the Company evaluate other potential time periods for D-TOU and/or G-3-TOU? If yes, please describe all alternative time periods that were considered by the Company.

    c. If the answer to (b) is yes, then did the Company quantitatively evaluate the implications of alternative time periods on the TOU rate designs, including, for example, considering how the use of alternative time periods would impact the peak to off-peak price ratios? Please explain in detail and provide the results of any such evaluation.

    d. How did the Company determine the which months to assign to the summer season and which months to assign to the winter season?

66. Refer to pages 16-17 of the direct testimony of Greg Tillman, where Mr. Tillman discusses the development of time periods and the definition of seasons for D-TOU and G-3-TOU. Please comment on the following rate structure design alternatives, indicating whether the Company considered this alternative, indicating whether this option could be appropriate for D-TOU and/or G-3-TOU, and discussing any benefits or drawbacks of the following alternative designs for the Company's proposed TOU rates.

a. A two-period rate design with only peak and off-peak periods.

b. A rate design with more than two seasons.

c. A rate design with fewer periods in certain seasons.

d. A rate design with lower peak to off-peak price ratios.

e. A rate design in which only distribution costs are not recovered on a time-varying basis.

67. Refer to page 16 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that determining the periods for D-TOU and G-3-TOU included "Additional technical considerations." Please detail these considerations, clearly explaining how they influenced the determination of periods for the proposed TOU rates.

68. Refer to page 16 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that the Company's "time period analysis identified some areas of potential improvement." Please detail these areas of potential improvement and indicate any plans for addressing them in the future.

69. Refer to page 16 of the direct testimony of Greg Tillman, where Mr. Tillman indicates that the Company's "time period analysis identified some areas of potential improvement." Please detail these areas of potential improvement and indicate any plans for addressing them in the future.

70. Refer to Attachment DOE 1-1.8, provided in response to Department of Energy Data Request No. 1-1, and specifically to the worksheet labeled "Class_Hourly_Load_Shape."
    a. How did the Company determine this load shape?
    b. Why is load data only available through June 30, 2022?

71. Refer to Attachment DOE 1-1.9, provided in response to Department of Energy Data Request No. 1-1, and specifically to the worksheet labeled "Class_Hourly_Load_Shape."

    a. How did the Company determine this load shape?
    b. Why is load data only available through June 30, 2022?

72. Refer to Attachment GWT-1, and the table titled "TOU Rate ($/kWh) by Component," where two footnotes indicate that the following charges and factors are excluded for the time-varying rates: Reliability Enhancement/Vegetation Management Charge, Revenue Decoupling Adjustment Factor, Stranded Cost Charge, and Storm Recovery Adjustment Factor.

    a. Which of the noted charges and factors are assessed volumetrically?

    b. Please reproduce the "Rate Ratios" table provided in Attachment GWT-1 so that it reflects the impact of all volumetrically recovered charges.

73. Refer to Attachment GWT-2, and the table titled "TOU Rate ($/kWh) by Component," where two footnotes indicate that the following charges and factors are excluded for the time-varying

rates: Reliability Enhancement/Vegetation Management Charge, Revenue Decoupling Adjustment Factor, Stranded Cost Charge, and Storm Recovery Adjustment Factor.

a. Which of the noted charges and factors are assessed volumetrically?

b. Please reproduce the "Rate Ratios" table provided in Attachment GWT-1 so that it reflects the impact of all volumetrically recovered charges.

74. Refer to page 28 of the direct testimony of Greg Tillman, where, in the context of discussing Rates EV-L-E and EV-M-E, Mr. Tillman refers to "typical utilization." What is "typical utilization?"

75. Refer to page 22 of the direct testimony of Greg Tillman, where Mr. Tillman discusses "appropriate uses" for time-differentiated distribution rates. Please explain in detail how time-differentiated distribution rates can promote each of the following uses mentioned by Mr. Tillman:

a. Encourag[ing] beneficial electrification and technology adoption

b. Develop[ing] a better understanding of customer desires and behavior

c. Gain[ing] deeper insights into grid operations and modernization investments

d. Captur[ing] the benefits of distributed resources

76. Refer to page 26 of the direct testimony of Greg Tillman, where Mr. Tillman discusses the D-10 rate. Please explain in detail how the thirteen-hour peak period window for this rate was determined and provide any relevant supporting data and/or workpapers substantiating this determination.

<u>Balashov and Strabone</u>

77. Refer to the direct testimony of Dmitry Balashov and Anthony Strabone at page 9, lines 14-16, in which the witnesses state that among the functionalities the deployment of AMI will facilitate is an "enhanced customer care and customer empowerment to manage bills, by reviewing consumption in near real time to identify opportunities for savings or facilitate billing disputes through off-cycle meter readings, etc."

a. Please describe the extent to which these "functionalities" will be duplicative of those provided via the statewide customer data platform being developed, with the participation of Liberty's two retail utilities in New Hampshire, pursuant to Docket No. DE 19-197.

b. Please describe the extent to which Liberty's plan for AMI deployment, and any related upgrades to its internal systems, will interoperative with the DE 19-197 data platform and contribute to the success of the platform.

78. Refer to the direct testimony of Dmitry Balashov and Anthony Strabone at page 15, lines 16-19.

a. Did Liberty conduct a cost/benefit analysis on the appropriate level of Advanced Metering Functionalities as recommended by Staff? If yes, please provide this analysis. If not, please explain why Liberty has not carried out this analysis.

79. Did the Company conduct a cost/benefit analysis for its proposed AMI project? If yes, please provide a copy of the analysis in Excel with all formulae intact. If no, please explain why not.

80. Did the Company quantify any of the benefits associated with its proposed AMI project? If yes, please provide those values with supporting documentation in Excel with all formulae intact. If no, please explain why not.

81. Regarding the phased-in approach to AMI deployment, please explain if the Company is seeking approval of both the first and second phases of the AMI project as part of this MYRP.

82. Refer to the direct testimony of Dmitry Balashov and Anthony Strabone at page 26, lines 5-12, which states that meter hardware and firmware features which would trigger written consent requirements are disabled.

    a. Will Liberty enable these features for a future pilot or program if consent was obtained from customer for participation? Please explain why or why not.

    b. If Liberty is not planning to use the meter hardware and firmware features, please explain why Liberty chose to procure meters with this functionality.

Docket No. DE 23-039
Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty
Set 2 Data Requests from the Office of the Consumer Advocate to Liberty
August 26, 2023

1. Please provide a copy of Ms. Bulkley's and Mr. Wall's exhibits from their direct testimony in live Excel format with all formulas intact.

2. Please provide a copy of all sources referenced in Ms. Bulkley's and Mr. Wall's direct testimony.

3. Please provide the actual balance of short-term debt used by Liberty Utilities (Granite State Electric) Corp. for each month (or most frequently available) from January 1, 2016, to the most currently available in live Excel format.

4. Please provide the total actual balance of CWIP broken down into CWIP earning AFUDC and CWIP not earning AFUDC for Liberty Utilities (Granite State Electric) Corp. for each month (or most frequently available) from January 1, 2016, to the most currently available.

5. Please provide the monthly (or most frequently available) balance sheet and income statements for Liberty Utilities (Granite State Electric) Corp. for each year from January 1, 2016, to the most currently available in live Excel format.

6. Please provide the monthly (or most frequently available) balance sheet and income statements for Liberty Utilities Company for each year from January 1, 2016, to the most currently available in live Excel format.

7. Please provide the monthly (or most frequently available) balance sheet and income statements for Algonquin Power and Utilities Corp. for each year from January 1, 2016, to the most currently available in live Excel format

8. Please provide Liberty Utilities (Granite State Electric) Corp.'s electric sales to residential, commercial, and industrial customers for each month (or most frequently available) from January 1, 2018, to the most currently available.

9. Reference page 30, Table 6 of Ms. Bulkley's and Mr. Wall's direct testimony, please provide the percentage of operating income of each of the 17 companies in Ms. Bulkley's and Mr. Wall's proxy group derived from regulated electric operations.

10. Please provide a copy of all the major bond rating agency reports that cover Algonquin Power and Utilities Corp., Liberty Utilities Company, and Liberty Utilities (Granite State Electric) Corp. that were issued from January 1, 2018, to the most currently available.

11. Please list all debt and equity raised by Algonquin Power and Utilities Corp., Liberty Utilities Company, and Liberty Utilities (Granite State Electric) Corp. since January 1. 2015 to the

most currently available. For bonds, please provide the CUSIP number for all securities raised over this time period.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 3

1. Adjustments 1-13. Refer to the table on page 16 of 26 of K. Jardin and D. Dane's testimony filed May 5, 2023. For the adjustments that reference "Company Books and Records" provide documentation supporting the amount of each of the adjustments.

2. Adjustment 8. Refer to page 18 of K. Jardin's and D. Dane's testimony filed May 5, 2023.
   a. Provide documentation supporting the increase in the Londonderry Lease.
   b. Explain what the facility is used for.

3. Adjustment 12 – Reclass Expense to Regulatory Asset. Refer to Attachment KMJ/DSD-1, Schedule RR-3, page 3. Provide a breakdown of this amount.

4. Affiliate Charges. Please provide the amount of affiliate costs charged to Liberty Electric by category for each of the years 2018-2022, the amounts included in the the adjusted test year and included for recovery in each of the rate years.

5. Advertising Expense. Please provide all advertising expenses by category for each of the years 2018-2022, the amounts included in the the adjusted test year and included for recovery in each of the rate years.

6. Board of Director Fees and Meeting Costs. Provide the directors fees and meeting expenses for each of the years 2018-2022, the amounts included in the the adjusted test year and included for recovery in each of the rate years.

7. Board of Director Fees and Meeting Minutes. Provide copies of the Board of Director Meeting Minutes for 2021, 2022 and 2023 year-to-date.

8. Capital Expenditures. Refer to page 21 of 57 of Matthew DeCourcey and Gregg Therrien's Direct testimony filed on May 5, 2023 which states that the Company's capital spending has averaged roughly $30 million per year in recent years.

   a. Provide the calculation showing how the $30 million was derived.
   b. Please provide the total actual amount of capital expenditures incurred for each of the following years: 2018, 2019, 2020, 2021, 2022 and 2023 year to date.
   c. Please provide the total amount of capital expenditures authorized by the Commission for each of the following years: 2018, 2019, 2020, 2021, 2022 and 2023.
   d. Provide the Company's budgeted capital expenditures for each of the following years: 2018, 2019, 2020, 2021, 2022 and 2023 year to date.

9. Capital Expenditures. Refer to page 17 of 35 of Anthony Strabone's Direct testimony filed on May 5, 2023. Provide the actual amount of capital expenditures by the categories listed for each of the following years: 2018, 2019, 2020, 2021 and 2022 , the adjusted test year and the forecasted amounts for each of the rate years.

10. Capital Expenditures. Refer to page 17 of 35 of Anthony Strabone's Direct testimony filed on May 5, 2023.
    a. Provide the reason for the significant increase in discretionary spending in 2022 over the other years shown.
    b. Provide a list of the discretionary capital expenditures in 2022 by project and amount.

11. Capital Expenditures. Identify the total amount of capital expenditures that were disallowed by the Commission for imprudence in each of the years 2018, 2019, 2020, 2021 and 2023 in its annual Step filings.

12. Capitalized Incentive Compensation. Provide the amount of capitalized incentive compensation related to financial goals included in rate base in the adjusted test year and each of the rate years.

13. Caregiver Program. Does the Company offer payment for or reimbursement of caregiver (day care, elder care, and pet care) expenses as a benefit to employees? If so:
    a. Provide a detailed description of the program and identify which employees are eligible for the benefit.
    b. Provide the amount of caregiver program expense included in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022.

14. Civic, Political and Community Related Activity Expenses. Please provide the amount of aall civic political & community related activity expense included in the adjusted test year and included for recovery in each of the rate years along with a description of the expenses and how they benefit customers.

15. Outside Contractors Expense. Refer to PUC 1604.01(a) (17)
    a. Provide an itemization of outside ccontractor expense by vendor for the last five calendar years: 2018, 2019, 2020, 2021, 2022, the adjusted test year and each of the rate years.
    b. For any new contactors added in the rate years, explain the need for the new cost and provide documentation (contracts, invoices, etc.) supporting the new cost.

16. Contingencies. Does the Company apply a contingency factor or amount to its capital expenditure forecast included in the rate years? If so, provide an explanation of the Company's use of contingencies and identify the total dollar amount of contingencies applied to the forecasted capital expenditures included in rate base in each the rate years. Also provide documentation supporting the contingencies.

17. Contributions/Charity Donations. Please provide the total amount of contributions, and donations included in the adjusted test year and included for recovery in each of the rate years by separate payee, along with a description of and the purpose for each payee. Also identify the customer benefit associated with each cost.

18. Club Dues. Please provide the amount of country club and golf club expenses included in the adjusted test year and included for recovery in each of the rate years.

19. Corporate Aircraft.
    a. Identify the amount of corporate aircraft costs included in rate base in the adjusted test year, each rate year and each of the years 2018, 2019, 2020, 2021 and 2022 by account number.
    b. Identify the amount of corporate aircraft expenses included in O&M and A&G expense in the adjusted test year, each rate year and each of the years 2018, 2019, 2020, 2021 and 2022 by account number.
    c. Provide copies of the flight logs supporting the 2022 adjusted test year expenses.
    d. For each of the trips in the 2022 test year, identify the purpose of the travel.
    e. Does the company compare costs of commercial flights before utilizing its corporate aircraft? If so, describe the process. If not, explain why not.

20. Covid-19 Costs. Identify all Covid-19 related costs included in the adjusted test year and included for recovery in each of the rate years by type. Explain why the Company expects these costs to recur annually.

21. Covid-19 Efficiencies and Cost Savings. Identify all Covid-19 related efficiencies and cost savings included in the adjusted test year and each rate year by type. Explain whether the Company expects these savings to continue annually.

22. Customers.
    a. Provide the actual number of customers by major category (e.g., residential, commercial, and industrial, etc.) for each of the years: 2018, 2019, 2020, 2021, and 2023 year-to-date broken down by residential, commercial, and industrial.
    b. Identify any large commercial and industrial customers that have left in 2021, 2022 and 2023.
    c. Identify any large commercial and industrial customers that were added in 2021, 2022 and 2023.

23. Customer First Expense. Refer to Attachment KMJ/DMD-1 Schedule RR-3.13.
    a. Provide supporting documentation for the annual post implementation costs shown (2023-2026).
    b. Provide a description of the categories on lines 8-12.
    c. Provide the actual start date and estimated in service date of the project.
    d. Provide the actual amount spent in 2023 year to date.

24. Customer Education/Outreach Expense. Refer to Attachment KMJ/DMD-1, Schedule RR-3.11.
    a. Provide documentation supporting the Free Fee Credit Debit Card costs shown.
    b. For what date do the customer counts shown represent? Are they forecasts or actual customer counts? If they are forecasts, provide supporting documentation and calculations.
    c. Provide documentation supporting the annual amount of customer education/outreach expense.

25. Customer Deposits. Refer to Attachment KMJ/DMD-1, Schedule RR-4.2.
    a. Provide the monthly customer deposits balances for 2018, 2019, 2020, 2021, 2022 and year to date 2023.
    b. Provide the interest rate used by the Company in the test year and rate years to pay interest on customer deposit balances.

26. Cybersecurity expense. Refer to page 18 of 22 of Shawn Eck's testimony filed May 5, 2023.
    a. Provide a list of the projects comprising these amounts.
    b. Provide documentation supporting the capital and expense amounts shown.

27. Cybersecurity plan. Refer to page 2 of 22 of Shawn Eck's testimony. Please provide the annual cyber security plans filed with the Commission for the years 2020, 2021, 2022 and 2023.

28. Cybersecurity program. Refer to page 3 of Shawn Eck's testimony filed May 5, 2023.
    a. Provide a detailed description of the Company's proposed cyber security program.
    b. Is this a new program? If so, state when it began (or will begin) and when it will be completed. If this is not a new program, explain how it is different than the existing program.

29. Cybersecurity program. Refer to page 40 of 57 of the direct testimony Matthew DeCourcey and Gregg Therrien's Direct Testimony filed on May 5, 2023 which states that there is no way to know even what investments will be required, much less how much they will cost. With respect to each of the three rate years, explain when the cybersecurity investments will be known and measurable and how the forecasts will be derived.

30. Cybersecurity investments. Refer to page 38 of 57 of the direct testimony Matthew DeCourcey and Gregg Therrien's Direct Testimony filed May 5, 2023. Explain why the spending is mostly beyond management's control.

31. Cybersecurity investments. Will the cybersecurity investments be direct costs to Liberty Electric or will they be allocated costs to the parent?

32. Cybersecurity costs. Provide the actual amount of cyber security costs broken out by capital and expense for each of the years 2018, 2019, 2020, 2021 and 2022 by account number.

33. Deviations.
    a. Please identify all aspects of the Company's adjustments and requested revenue requirement that represent a conscious deviation from the principles and policies established in prior Commission Orders.
    b. Identify each area of deviation, and for each deviation explain the Company's perception of the principle established in the prior Commission Orders, and the dollar impact resulting from such deviation.
    c. Show which accounts are affected and the dollar impact on each account for each such deviation and the schedule where each deviation is reflected.

34. D&O Insurance Expense. Provide the Directors & Officers insurance expense for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

35. DOE Assessment. Refer to Attachment KMJ/DSD-1 Schedule RR-3.7.
    a. Provide a copy of the assessment invoice supporting the amount shown.
    b. Provide the DOE Assessment for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

c. Explain what the $10,000 recovered through the energy service rate represents.

36. Dues - Industry Associations.
   a. Identify all industry dues and memberships payments for each of the years 2018, 2019, 2020, 2021 and 2022, included in the adjusted test year and included for recovery in each rate year.
   b. State the purpose and objective of each organization listed.
   c. For each organization, identify the benefits provided to customers.
   d. State whether any of the organizations listed engage in lobbying or advocacy activities, attempts to influence public opinion, institutional or image-building advertising. If so, identify the amount and whether the Company has included the portions of dues related to such activities in the adjusted test year and each of the rate years.

37. Dues Non-Industry.
   a. Identify all non-industry dues and memberships payments for each of the years 2018, 2019, 2020, 2021 and 2022, included in the adjusted test year and included for recovery in each rate year.
   b. State the purpose and objective of each organization listed.
   c. For each organization, identify the benefits provided to customers.
   d. State whether any of the organizations listed engage in lobbying or advocacy activities, attempts to influence public opinion, institutional or image-building advertising. If so, identify the amount and whether the Company has included the portions of dues related to such activities in the adjusted test year and each of the rate years.

38. Economic Development Expenses. Refer to page 7 of 14 of Neil Proudman's direct testimony filed on May 5, 2023. Identify the total amount of economic development expenses by category for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years. Also provide an explanation of the expenses and how they benefit customers.

39. Employee Benefits. Provide a detailed listing of all employee benefits expenses by type and amount for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

40. Employee Cafeteria.
   a. Identify the total amount of employee cafeteria revenues and expenses, separately for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.
   b. Identify the location of the cafeteria.
   c. State whether there are restaurants near the Company's office building.

41. Employee Recognition/Awards Expense. Identify the amount of employee recognition expense for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years. (Including but not limited to dinners, luncheons, parties, picnics, barbeques, employee appreciation events, awards, prizes, gifts, etc.)

42. Entertainment/Sponsorships. Please provide the amount of sporting/entertainment event tickets, season tickets, suites, sponsorships, etc. for each of the years 2018,

2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

43. Environmental Remediation. Please provide the amount of environmental remediation expense for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

44. Executive, Officers & Director Vehicles. Provide a list of all vehicles provided to executives, directors and officers including the year, make, model, and employee name and the total cost included in the adjusted test year and each rate year associated with the vehicles.

45. Federal/State Covid Stimulus Funding/Loans. Provide a description of all federal and state pandemic related funding received, the total amount of federal and state funding received, the dates the funding was received, and a detailed explanation of how these amounts were reflected in the adjusted test year and rate years.

46. Gains/Losses on sale of utility property.

    a. Identify all gains and losses on sales of utility property for each year since the last rate case.
    b. For each transaction, provide a description of the property, the original cost, sale price, date acquired, date sold, and whether the asset is included in the adjusted test year and rate years rate base.
    c. Identify the amount of gains and losses that have been reflected in the revenue requirement in the adjusted test year and rate years and the schedule where they are reflected. If none are reflected in the revenue requirement, explain why not.
    d. If gains and losses occur in between rate cases, explain how they are treated for ratemaking purposes.

47. General inflation factor. Refer to page 9 of 26 of K. Jardin's and D. Dane's direct testimony filed May 5, 2023.

    a. Has a general expense escalator been authorized in any of Liberty's prior rate cases? If so, provide the docket number and a reference to the commission decision authorizing the inflation adjustment.
    b. Has a general expense escalator been authorized in any New Hampshire utilities rate cases? If so, provide the docket number and a reference to the commission decision authorizing the inflation adjustment.
    c. Provide the total amount of costs included in the adjusted test year and rate year that have been escalated by the general labor inflation factor by category (distribution expense, customer accounts expense, customer service, sales, A&G, etc.)

48. General Expense Escalator Workpaper. Attachment KMJ/DSD-1. Refer to Schedule RR-3.3. Provide the actual GDP inflation rates by quarter for 2020, 2021, 2022 and 2023 year-to- date.

49. Health Club/Fitness Center Expenses. Please provide the amount of health/fitness expenses (including but not limited to: fitness/gym memberships, exercise classes, cost of maintaining employee exercise rooms/equipment, etc.) for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

50. Incentive Compensation - Please provide the amounts of Incentive Compensation broken out by plan for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years. If there are amounts charged to capital provide those separately.

51. Incentive Compensation. Identify all amounts of incentive compensation that the Company has removed from the adjusted test year and rate years and the reason for which it is not seeking recovery.

52. Incentive Compensation. Please provide complete copies of all incentive compensation plans for all employees, bonus programs or other incentive award programs in effect at Liberty for the adjusted test year, the rate years and each of the years 2018, 2019, 2020, 2021 and 2022.

53. Incentive Compensation. For each plan, for the adjusted test year, and each of the years 2018, 2019, 2020, 2021 and 2022, provide the number of employees eligible under the plan for incentive compensation payment and number of eligible employees that did not receive incentive compensation payment.

54. Incentive Compensation. Provide for the for the adjusted test year, and each of the years 2018, 2019, 2020, 2021 and 2022, the various goals on which incentive payments were to be determined and the actual achievement attained (i.e., the response should show actual metrics and not a simple reference that the goal was at target, not at target, at maximum, etc.)

55. Incentive Compensation. Does the Company adjust the non-financial goals based on prior years achievements? If so, provide an example. If not, explain why not.

56. Incentive Compensation. Is there a financial goal, that if not met, would result in no incentive compensation payments being made? If so, identify the goal.

57. Incentive Compensation. In what possible scenarios would no incentive compensation payments be made?

58. Incentive compensation. Please provide any studies the Company has in its possession that reflect a comparison of Liberty's incentive compensation to that allowed in rates in other jurisdictions.

59. Incentive Compensation. Does the Company have any studies or analysis that show that its incentive compensation plan provides any benefit to customers? If so, please provide copies of all documents.

60. Injuries and Damages. Provide the injuries and damages reserve balance, including debits and credits to the reserve, for each of the years 2018, 2019, 2020, 2021 and 2022.

61. Injuries and Damages. Refer to Attachment KJM/DSD-1. Schedule RR-2, page 2, Line 91.
    a. Provide the injuries and damages expense for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.
    b. Explain why the Company expects this expense to increase in each of the rate years.

62. Insurance Expense. Refer to Attachment KMJ/DSD-1 Schedule RR-3.9. Please provide a schedule showing the amount of insurance expense by type for each of the years 2018, 2019, 2020, 2021, 2022, the adjusted test year, and included for recovery in each of the rate years.

63. Insurance Expense. Refer to Attachment KMJ/DSD-1 Schedule RR-3.9.
    a. Explain why there are 10 Ex Liability policies and a description of the policies.
    b. Explain what the three placement fees represent.

64. Insurance credits. Refer to Attachment KMJ/DSD-1 Schedule RR-3.9. Provide the amount insurance credits/distributions received by type (e.g., Energy Insurance Mutual Limited, Nuclear Electric Insurance Limited, etc. received in each of the years 2018, 2019, 2020, 2021 and 2022 and the amounts reflected in the test year, adjusted test year and each of the rate years. If amounts were received in prior years but none are reflected in the rate years explain why not.

65. Insurance Expense. For insurance coverage for which the Company is self-insured, please provide a description of that self-insurance, a description of how it is accounted for in the utility's books and records and a description of activity for each year 2018, 2019, 2020, 2021 and 2022, the adjusted test year and included for recovery in each rate year.

66. Intercompany Rent. Refer to Attachment KMJD/DSD-1,Schedule RR-3.8.
    a. Provide the address of each facility leased and a detailed explanation of the what these rental expenses pertain to.
    b. Provide the amount rental expense by category included in the adjusted test year, each rate year and each of the calendar years 2018, 2019, 2020, 2021 and 2022.

67. Judgments/Settlements.
    a. Please provide, in list form, the details of all judgments and/or settlements resulting from suits brought which involved Liberty as a defendant, which resulted in Liberty, during the test year, paying or agreeing to pay or being ordered to pay an amount in excess of $10,000, including but not limited to the case name, a brief description of the case, the date filed, the date of settlement or the date of judgment and the amount Liberty was ordered or agreed to pay. Provide this information even if appeals are pending and note every instance of an appeal.
    b. Provide the total amount of judgments/settlements expense included in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022.

68. Legal Expense. Please itemize the amount of outside legal expense, by vendor, included in the adjusted test year, each rate year and each of the calendar years 2018, 2019, 2020, 2021 and 2022.

69. Lobbying/Public Advocacy Costs/Government Relations Expenses.
    a. Please identify all lobbying/public advocacy costs/government relations costs included in above-the-line accounts (including amounts allocated from affiliates) in the adjusted test year and each of the rate years.
    b. For each, describe the applicant's lobbying/public advocacy/government relations activities and show the name of the individuals and their salaries,
    c. the organizations involved,

d. all company-paid or reimbursed expenses or allowances and the account charged for all personnel for whom a function is that of lobbying/public advocacy, on the local, state, or national level in schedule form.

70. Non-recurring expenses.
    a. For each expense account in the adjusted test year and each rate year, list each non-recurring expense or credit exceeding $10,000.
    b. For each such expense or credit, state the amount, the basis and provide copies of all journal entries and supporting documentation.
    c. Reconcile the dollar amounts included above to any adjustments proposed by the Company.

71. O&M Budget. Refer to Rate Case Filing Requirement PUC 1604.01(a)(8). Provide Liberty Electric's annual O&M budget for each of the years 2018 through 2022.

72. A&G Budget. Refer to Rate Case Filing Requirement PUC 1604.01(a)(8). Provide Liberty Electric's annual A&G budget for each of the years 2018 through 2022.

73. Construction Budget. Refer to Rate Case Filing Requirement PUC 1604.01(a)(8). Provide Liberty Electric's annual construction budget for each of the years 2018 through 2022.

74. Other Public Company Costs. Please provide an itemization of other public company costs (investor relations, SEC reporting, etc.) by type for each year 2018, 2019, 2020, 2021, and 2022, the adjusted test year and included for recovery in each of the rate years.

75. Late Fees. Did the company suspend late fees and any other fees to customers due to the Covid-19 pandemic? If so, identify all fees that were suspended and provide the dates when the fees were suspended and when they resumed being assessed.

76. Other Operating Revenues. Refer to Attachment KMJ/DSD-1, Schedule RR-2.3.
    a. Provide a description of each of the revenue accounts listed on lines 3-10.
    b. Provide a description of each proforma adjustment.
    c. Provide the workpapers including calculations showing how each account was specifically forecasted.

77. Other Revenues. Refer to Attachment KMJ/DSD-1 Schedule RR-2.3. Explain the reason the company has forecasted other operating revenues to remain constant in the rate years.

78. Other Sales. Refer to Attachment KMJ/DSD-1 Schedule RR-2 Line 7. Explain why the Company has not included any forecasted amounts for Account 449 in the rate years. Also explain what these sales represent.

79. Payroll. Please provide for each year 2018, 2019, 2020, 2021 and 2022, the adjusted test year, and each of the rate years, the amount of base pay, overtime, incentive compensation, and the amount of other pay broken down in the most detailed format available including the amount charged to capital, charged to expense, and charged to other. If any of the other is ultimately expensed, provide the amount ultimately expensed in each year.

80. Payroll. Provide Capital and O&M budgeted and actual payroll for each year 2018, 2019, 2020, 2021 and 2022, the adjusted test year and each of the rate years.

81. Payroll. Provide, for each employee group, for each year 2018, 2019, 2020, 2021 and 2022, the adjusted test year and the adjusted test year, the aggregate percentage increase in compensation granted and provide a breakdown of the aggregate percentage increase by type of increase (i.e., merit, promotion, step, etc.).

82. Payroll (Full Time Equivalents) - Please provide the number of FTE's included in the adjusted test year, each rate year and for each of the years 2018, 2019, 2020, 2021 and 2022.

83. Payroll. Refer to DOE 4-16. Update this response to include 2018 information for:
    a. Number of actual employees broken down between type (e.g., salaried, hourly, union, non-union, temporary, etc.).
    b. Regular payroll broken down between expensed, capitalized, and other.
    c. Overtime payroll broken down between expensed, capitalized, and other.
    d. Temporary payroll broken down between expensed, capitalized, and other; and
    e. Other payroll (specify).

84. Payroll. Provide for each employee group, by month, for each year 2018, 2019, 2020, 2021 and 2022 and the adjusted test year, and each of the rate years: the number of full-time employees budgeted, the number of part-time employees budgeted and the actual number of full-time employees and part-time employees (not FTEs). Also, provide for each period the budgeted and actual FTEs.

85. Payroll. Please provide a list of all open positions in the adjusted test year and each rate year including:
    a. Length of time that the position has been open.
    b. Status of filling the position,
    c. Planned hiring dates for each position,
    d. Hiring dates for any of these positions that have been filled.
    e. Fully loaded annual salary for unfilled positions
    f. Job Title

86. Payroll. Please provide a list of all new positions in the adjusted test year and each of the rate years including:
    a. Length of time that the position has been open.
    b. Status of filling the position,
    c. Planned hiring dates for each position,
    d. Hiring dates for any of these positions that have been filled.
    e. Fully loaded annual salary for unfilled positions
    f. Job Title

87. Payroll. Please provide a description of the Company's merit and cost of living wage rate increase policies.

88. Payroll Vacancy Adjustment. Did the Company apply a vacancy adjustment to its rate year payroll expense? If so, provide the amount and all supporting calculations. If not, explain why not.

89. Penalties. Please list all penalties and fines paid by the Company in the adjusted test year and included in each of the rate years. Also include a description of each fine/penalty.

90. Pension/OPEB/401k Expense. Provide the pension, OPEB and 401k expense approved by the Commission in the last rate cases for each of the years 2018, 2019, 2020, 2021 and 2022.

91. Pension/OPEB/401k Expense. Provide the actual pension, OPEB and 401k expense included in the adjusted test year, each of the rate years and for each of the years 2018, 2019, 2020, 2021 and 2022.

92. Plant Held for Future Use. Identify all amounts of plant held for future use included in rate base in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022. For each property, provide the amount included, the date the property was acquired, a description of the property and the date when the property will be providing service to customers.

93. Plant in Service. Refer to Attachment KMJ/DMD-1, Schedule RR-6.5.
    a. Provide the actual plant in service balances for each of the years 2018, 2019, 2020, 2021, 2022 and the adjusted test year and the forecasted amounts for each of the rate years.
    b. Provide the 13-month average plant in service balances for each of the years 2018, 2019, 2020, 2021, 2022 and the adjusted test year and the forecasted amounts for each of the rate years.

94. Plant Additions. Refer to Attachment KJM/DSD-1. Schedule RR-6.1. Provide documentation supporting the following projects:
    a. Reliability Projects (Bellows Falls, etc.) Account No. 364, page 6 $3,790,000, page 10 $ 6,210,000
    b. Rockingham West Circuit Account 362, page 6 $9,900,000
    c. Bare Conductor Replacement Project Account 365, page 9 $2,500,000 page 13 $2,575,000
    d. IE NN URD Cable Replacement Account 366, page 10 $1,660,000 and page 14 1,648,000
    e. Install Lebanon1L2 Feeder Tie Plainfield, Account 364, page 14 $1,575,000
    f. SCADA and Distribution Automation Account 391.1 page 14 $1,050,000
    g. AMI $9,500,000 Account 397 page 15 $9,500,000

95. Plant Additions. Refer to Attachment KJM/DSD-1, Schedule RR-6.1. Provide the actual annual additions for each of the following accounts. For each, also explain the reason for the increase in spending in the rate years and documentation supporting the increases.
    a. Dist-Damage & Failure Blanket Account 365
    b. GSE-Dist New Bus-Comm Blanket Account 364
    c. GSE-Dist New Bus Resid Blanket Account 364
    d. Transportation Fleet & Equip Blanket Account 392

96. Pole Attachment Fees and Revenues. Provide the pole attachment fees and revenues separately for each of the years: 2018, 2019, 2020, 2021, 2022 the adjusted test year and each of the rate years.

97. Prepaid Expenses. Refer to Attachment KJM/DSD-1, Schedule RR-4, line 7.
    a. Provide an itemization of the test year, adjusted test year and rate year amounts.

   b. Provide the monthly balances for 2017, 2018, 2019, 2020, 2021, 2022 and 2023 year to date.

98. Rate Case. Refer to page 10 of 57 of the Direct Testimony of Matthew DeCourcey and Gregg Therrien, filed on May 5, 2023 which states that the Company will file a new rate case at the end of the three-year MYRP. If the MYRP is not approved, state when the Company anticipates it would file its next rate case.

99. Rate Case Expense. Refer to page 39 of 51 of Erica Menard's Direct Testimony filed May 5, 2023.
   a. Provide the basis for using a 24-month amortization.
   b. Confirm that the rate case expense is not reflected in the rate year expenses as the Company proposes to recover these through the ERAM charge.

100. Relocation Expense. Identify the amount of employee relocation expense included in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022. Also, provide a description of the purpose for the relocation expenses.

101. Regulatory Asset- Battery Storage Pilot Costs. Refer to page 9 of 15 of the Direct Testimony of Kristin Jardin, Daniel Dane and Gregg Therrien filed on May 5, 2023.
   a. Identify the regulatory guidance relied on for the deferral of these costs to be recorded as a regulatory asset.
   b. Provide a breakdown by category of the total amount deferred and requested for recovery in this case.

102. Regulatory assets/liabilities. Refer to page 10 of 26 of K. Jardin and D. Dane's direct testimony filed on May 5, 2021 which states that regulatory assets and liabilities were amortized over a one-year period in rate year 1.
   a. If rates are not reset until the next rate case, explain how the Company will not continue to collect these amounts annually.
   b. Explain the basis for using a one-year amortization.

103. Reliability Metrics. Refer to page 6 of 14 of of Neil Proudman's direct testimony filed on May 5, 2023 which states "the Company has seen a steady improvement in the System Average Interruption Duration Index ("SAIDI") and the System Average Interruption Frequency Index (SAIFI") measurements.
   a. Provide the Company actual metrics (SAIDI, SAIFI) for each of the years 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, and 2022.
   b. Provide the Company's target metrics (SAIDI, SAIFI) for each of the years 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022.

104. Revenues and expenses. Refer to Attachment KJM/DSD-1, Schedules RR-2.2- RR-2.13. For each of the accounts shown, provide the actual amounts for each of the years 2018, 2019, 2020, 2021, 2022 and include the amounts for adjusted test year and each of the rate years.

105. SERP - Please provide the amount of SERP (Supplemental Executive Retirement Plan) included in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022.

106. SERP - Please identify both the number of employees eligible for SERP and the number of employees ineligible for SERP for each of the years 2018, 2019, 2020, 2021 and 2022.

107. SERP - Please explain how eligibility for SERP is determined.

108. SERP - Please describe the benefits provided by the Company's SERP plan.

109. SAP Expenses. Provide the total amount of SAP O&M and A&G expenses included in the adjusted test year and each rate year associated with the SAP system that went live in October 2022. For costs included in each of the rate years, explain why these costs are expected to be incurred annually.

110. Severance Pay. Please provide the amount of severance pay for each of the years 2018, 2019, 2020, 2021 and 2022 and included in the adjusted test year and included for recovery in each of the rate years.

111. Storm Expense. Refer to page 17 of 26 of the Direct Testimony of K. Jardin and D. Dane. Provide the actual storm restoration expenses incurred in each of the years 2018, 2019, 2020, 2021 and 2022.

112. Student Loan Repayment Expenses. Does The Company offer repayment of student loans as a benefit to employees? If so:
    a. Provide a detailed description of the program and which employees are eligible for the benefit.
    b. Provide the amount of student loan repayment expenses for each of the years 2018, 2019, 2020, 2021 and 2022 and included in the adjusted test year and included for recovery in each of the rate years.

113. Supplies and Inventory. Refer to Attachment KJM/DMD-1, Schedule RR-4.2. Provide the monthly balances for 2018, 2019, 2020, 2021, 2022 and 2023 year to date.

114. Temporary Help. Provide the amount of temporary help expense for each of the years 2018, 2019, 2020, 2021 and 2022 and included in the adjusted test year and included for recovery in each of the rate years.

115. Training Expense. Refer to page 5 of 14 of Neil Proudman's direct testimony filed on May 5, 2023. Do the electric employees receive any training regarding the gas side business? If so, provide the amount of gas side training expense included in the adjusted test year and each of the rate years and for each of the years 2018, 2019, 2020, 2021 and 2022.

116. Training Expense. Provide the amount of employee training expense included in the adjusted test year, each of the rate years and each of the years 2018, 2019, 2020, 2021 and 2022. Provide a description of the types and purpose of the training conducted each year.

117. Trial Balance. Please provide a copy of the Company's trial balances for the periods ending 12/31/2020, 12/31/21 and 12/31/2022.

118. Uncollectibles. Refer to Attachment KMJ/DSD-1, Schedule RR-3.10. Provide the uncollectible expense for each of the years 2018, 2019, 2020, 2021 and 2022, the adjusted test year, and included for recovery in each of the rate years.

119. Uncollectibles/Sales. Refer to Attachment KMJ/DSD-1, Schedule RR-3.10. Provide the total sales of each electricity for each of the years 2018, 2019, 2020, 2021 and 2022 and forecasted for each of the rate years.

120. Uncollectibles. Provide a schedule showing the write-offs, recoveries and sales of electricity for the adjusted test year and each of the years 2017, 2018, 2019, 2020, and 2021.

121. Variance Reports. Provide copies of each written capital, operating and A&G budget variance reports and variance explanation used by Liberty management to monitor and control budgets under his or her responsibility. Provide for each month of 2020, 2021, 2022 and 2023 year-to-date.

122. Vegetation Management Costs. Refer to Table 2 on page 30 of Anthony Strabone's direct testimony and Table 1 on page 14 of Heather Green and J.M. Sparkman's filed on May 5, 2023. Are the storm vegetation management costs on Table 1 (Strabone) included in the costs in Table 2 (Green/Sparkman)?

123. Vegetation Management Program. Refer to page 4 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.
   a. Provide a copy of the Company's current Vegetation Management Program Policy.
   b. Provide a copy of the Company's prior Vegetation Management Program Policy.

124. Vegetation Management Program – Tree Removals. Refer to page 11 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.
   a. Provide the number of trees removed in each of the years 2018, 2019, 2020, 2021, 2022, 2023 year to date, and forecasted for each of the rate years.
   b. Provide cost associated with the tree removal in each of the years 2018, 2019, 2020, 2021, 2022, 2023 year to date, and forecasted for each of the rate years.

125. Vegetation Management Program – Tree Removals. Refer to page 17 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023. Identify the number of trees in backlog for each of the years 2018, 2019, 2020, 2021 and 2022.

126. Vegetation Management Program. Refer to page 17-18 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.
   a. Had the Company previously worked with Clear Way prior to 2021?
   b. Provide the date that the contract with Clear Way was executed, the date Clear Way began work and the date Clear Way ceased performing work.
   c. Provide the date that the new contract was executed with Asplundh, the date Asplundh began work under the new contract.
   d. Identify the portion of the 2022 expenses that relate to completing the 2021 costs that were not completed by Clear Way defaulting in 2021.

127. Vegetation Management Program. Refer to page 20 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.
   a. Explain why Liberty no longer receives contributions from Consolidated Communications.
   b. Does the Company currently perform vegetation management on the poles owed by Consolidated Communications? If so, provide the annual costs associated with these poles for each of the years 2018, 2019, 2020, 2021 and 2022.

128. Vegetation Management Program. Refer to page 23 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023. Provide the traffic detail charges for each of the years 2017, 2018, 2019, 2020, 2021, 2022 and 2023 year to date.

129. Vegetation Management -IVM Costs. Refer to page 25 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023 which states that the Company is looking to return to Integrated Vegetation Management. Explain when and why this initiative ceased and when the Company plans to return to it.

130. Vegetation Management - IVM Costs. Refer to Table 3 on page 27 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023. Provide the historic IVM expenses for each of the years 2017, 2018, 2019, 2020, 2021, 2022 and 2023 year to date, the adjusted test year and each of the rate years.

131. Vegetation Management. Refer to page 7 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.
   a. Provide escalation factor used outside of the normal inflationary clauses common to multi-year RFPs. Also provide all documentation and calculations supporting the factor used.
   b. Provide a description of the fuel adjustment clause that will be added.

132. Vegetation Management – Escalation Factors. Refer to pages 29-30 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023. Provide documentation supporting the escalation factors identified.

133. Vegetation Management - Contracts. Refer to page 7 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023.

   a. Provide copies of the two multi-year contracts referenced on lines 10-11.
   b. Provide a list of all vegetation management vendors currently under contact and the dates the contract covers.

134. Vegetation Management expense.
   a. Provide the Company's budgeted Vegetation Management expense for each of the years: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, the adjusted test year and each of the rate years.
   b. Provide the actual vegetation management expense for each of the years: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023 year to date.
   c. Provide the annual vegetation management expense approved in the last rate cases for each year 2018, 2019, 2020, 2021 and 2022.

135. Vegetation Management expense.
   a. Provide the budgeted miles trimmed for each of the years: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and 2023.
   b. Provide the actual miles trimmed for each of the years: 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022 and year to date 2023.

136. Vegetation management expense. Refer to Schedule RR-3.12. Provide supporting documentation for the five-year plan amounts shown.

137. Vegetation Management Plans. Refer to Attachment 7 of the Settlement Agreement in DE 19-064. Provide copies of the Reliability Enhancement Plan and Vegetation Management Plans filed with the Commission for the calendar years 2021, 2022 and 2023.

138. Vegetation Management Assessment Costs. Refer to page 27 of 31 of Heather Green and J.M. Sparkman's Direct Testimony filed May 5, 2023. Provide the amount

included in the adjusted test year and each of the rate years for the funding to engage an outside expert to review the current vegetation management program and provide recommendations. Provide documentation supporting the amount requested for recovery.

139. Working Capital. Please explain all changes in methodology in deriving the working capital in the current case from the previous rate case.

140. Workpapers. Provide copies of all the revenue requirement schedules and workpapers in excel.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 4

1. Refer to the Company's response to OCA 1-10(b). Please explain the way in which the currently approved "rate step methodology" and the MYRP proposed reconciliation process differ in terms of (1) annual customer rate adjustments, (2) annual filings to the Commission, and (3) deferred revenues.
2. Refer generally to the Company's MYRP application and confirm that the Company is not proposing to true up its costs to revenues. If not confirmed, please explain.
3. Refer to the Company's response to OCA 1-12(f).
    a. Please explain if the Company's answer represents a case where the Company exactly earns its ROE.
    b. What would the rate impact be to an average residential customer if the Company's ROE fell to 300 bps below the ROE?
    c. If the Company's ROE falls below 200 bps, is 75 percent of that deficit collected from customers? If yes, please explain if that occurs through a rate adjustment. If no please, explain how the Company recovers any under earnings.
4. Refer to the Company's response to OCA 1-13. Please also refer to the Direct Testimony of Witnesses DeCourcey and Therrien at page 34, lines 11-12 and provide the dollar equivalent of a basis point for each year of the MYRP.
5. Refer to Attachment 23-039 OCA 1-14.1, page 6. Please explain what is meant by "probability" in the Performance Incentive Mechanisms table.
6. Refer to the Company's response to OCA 1-18 and confirm if "annual adjustments" refers specifically to annal reconciliation of under-earnings. If not confirmed, please explain.
7. Refer to the Company's response to OCA 1-23. Does this indicate the proposed MYRP preserves the incentive for cost control compared to the current stair-step approach? Please explain.
8. Refer to the Company's response to OCA 1-25(a).
    a. How many replacement projects were not approved by the Commission during the last five years and why were they not approved?

b. For projects added but not on the specific list of projects, was the Company permitted to defer those costs and seek recovery at a later time? Please explain.

9. Refer to the Company's response to OCA 1-27 regarding increased electrification.

   a. Please provide a copy of Liberty's electrification forecast for the next 10 years in Excel format.

   b. Please explain how Liberty developed its electrification forecast, including all sources and resources relied upon.

   c. Does the Company currently offer incentives to customers to encourage building electrification? If yes, please provide a summary of those incentives. If not, please explain why not.

   d. Please provide an Excel spreadsheet with the forecasted increase in load from building electrification over the next 10 years.

   e. Did Liberty incorporate forecasted electrification into its load forecast? If yes, please provide the total MWh and coincident peak demand (MW) associated with electrification for each year of the load forecast in Excel format. If not, please explain why not.

10. Refer to the Company's response to OCA 1-28(b) and explain why the incremental investments would undermine the incentive aspect of the PIMs plan.

11. Refer to the Company's response to OCA 1-35.

    a. Please explain the issue related to the "availably of data" and how it impacted the ability of the Company to propose a PIM related to Customers Experiencing Multiple Interruptions (CEMI).

    b. Does reference to the "number of customers affected" indicate that there are relatively few customers experiencing multiple interruptions? Please explain.

    c. Please list the "other factors".

12. Refer to the Company's response to OCA 1-42(a).

    a. Please explain why the Company does not have any NWA project identified.

    b. Could any of the MYRP projects in the capital plan be deferred or avoided by implementing an NWA?

    c. Did the Company consider NWAs for any of the projects in the MYRP capital plan? Please explain why or why not.

13. Refer to the Company's response to OCA 1-44. Describe the analysis undertaken by the Company and provide all supporting materials.

14. Refer to the Company's response to OCA 1-47.

a. Did the Company calculate the ratepayer impacts of its proposed Reliability PIM? If yes, please provide a copy of the analysis in Excel format with formulae intact. If no, please explain why not.

b. Did the Company calculate the ratepayer impacts of its proposed TOU Rate Adoption PIM? If yes, please provide a copy of the analysis in Excel format with formulae intact. If no, please explain why not.

c. Did the Company calculate the ratepayer impacts of its proposed Interconnect PIM? If yes, please provide a copy of the analysis in Excel format with formulae intact. If no, please explain why not.

15. Refer to the Company's response to OCA 1-49.

a. Do third-party developers of distributed energy resources (DERs) currently have access to 8760 load profiles at the feeder and substation level? Please explain.

b. Do third-party developers of DERs currently have access to voltage sag data at the feeder and substation level? Please explain.

c. Do third-party developers of DERs currently have access to power quality data at the feeder and substation level? Please explain.

16. Refer to the Company's response to OCA 1-50.

a. What are the costs associated with the AMR meters to be used for the TOU rate option? Please provide the total projected costs for each year of the MYRP.

b. Will the Company replace these AMR meters when it deploys AMI? Please explain.

17. Refer to the Company's response to OCA 1-32(d).

a. Please explain why the values listed in columns SAIFI and SAIDI do not match the values listed in the Direct Testimony of Erica Menard, at page 15 Tables 2 and 3.

b. Describe the calculation used to calculate the five-year rolling average in the target. For example, for the SAIFI Target for 2022, the calculation is not (0.91 + 0.74 + 0.61 + 0.85 + 0.85)/5 as that equals 0.792 but the target is 1.00.

18. Refer to the Company's response to OCA 1-40(c).

c. If the Company's proposed interconnection PIM had been implemented between 2018 and 2022, would the Company have achieved the 25-day target, and thus received the reward, for each year? Please explain.

d. Please explain how the Company developed its targets for the interconnection PIM.

19. Refer to the Company's response to OCA 1-41.

e. For each of the metrics listed in the response which are not reported elsewhere, please provide the specific reason why these metrics were not given further consideration.

20. Refer to the Company's response to OCA 1-57(a).

a. If the Best-Bill Guarantee entails refunding customers on the TOU rate of all revenues collected from them that are in excess of the level of revenues that would alternatively have been collected from the same customers had they been enrolled on the default, non-TOU rate, then won't this result in under-collection of revenues from certain TOU customers relative to these customers' respective costs of service? Please explain.
b. If the answer to (a) is yes, then how does the Company propose to cover any such under-collection of revenues?
c. If the answer to (a) is yes, then does the Company anticipate that there will be any resulting cost shifting?
d. If the answer to (c) is yes, then please provide any available forecast of this cost-shifting that will result from the Best-Bill Guarantee.

21. Refer to the Company's response to OCA 1-57(b). Has the Company evaluated any bill protection schemes deployed in other jurisdictions? If yes, please note any schemes evaluated and any lessons learned.

22. Refer to the Company's response to OCA 1-60(a) and to the originally cited section on page 25 of Mr. Tillman's direct testimony, where the witness states that "customers who choose a competitive supplier must seek access to time-differentiated energy service rates through their selected energy service provider." In light of the response provided to OCA 1-60(a), whereby the Company clarifies that it is not proposing the imposition of any requirements on customer competitive supply contracting, please explain why Mr. Tillman states that these customers "must seek access to time-differentiated energy service rates."

23. Refer to the Company's responses to OCA 1-61(b) and OCA 1-61(c). Please clarify what the practical differences would be for cost allocation and rate design, if any, were the Company to create separate customer classes for TOU enrolled customers rather than creating separate rate classes for TOU enrolled customers.

24. Refer to the Company's response to OCA 1-66(e). Please elaborate on the specific reasons why the Company might seek to incentivize changes in consumption behavior through a rate design with price signals that are not cost-based, noting any relevant policy considerations.

25. Refer to the Company's response to OCA 1-68.
    e. Why does the Company consider having a shoulder season in addition to summer and winter seasons a potential improvement?
    f. Did the Company develop an alternative rate design with a shoulder season in addition to summer and winter seasons? If so, please provide all details about this alternative rate design.
    g. Why does the Company consider including morning hours as part of the peak period in the winter season a potential improvement?
    h. Did the Company develop an alternative rate design with morning hours as part of the peak period in the winter season? If so, please provide all details about this alternative rate design.

i. Please provide any other alternative rate designs that the Company considered and/or developed.

26. Refer to the Company's response to OCA 1-70(b). Is there more recent load data now available? If yes, please address whether the Company evaluated this more recent load data and why the Company opted not to update its TOU rate design proposal based upon the more recent load data.

27. Refer to the Company's response to OCA 1-75. In the Company's view, how should the Company balance the imperative for cost-based rates with the other priorities, including encouraging electrification and capturing the benefits of distributed resources?

28. Refer to the Company's response to OCA 1-75(a). Please clarify which "benefits" the response references, and who would be the beneficiaries.

29. Refer to the Company's response to OCA 1-75(b). Please describe specifically the insights about customer behavioral changes that the Company expects to glean as a result of an increased opportunity for savings through time-differentiated distribution rates.

30. Refer to the Company's response to OCA 1-75(c). Please describe specifically how grid operations value will be enhanced through increases in the peak-to-off-peak TOU price ratios, addressing how, if at all, the fact that time-varying distribution rates are not cost-based would interact with this enhancement in grid operations value.

31. Refer to the Company's response to OCA 1-75(c). Please describe specifically how grid modernization value will be enhanced through increases in the peak-to-off-peak TOU price ratios, addressing how, if at all, the fact that time-varying distribution rates are not cost-based would interact with this enhancement in grid modernization value.

32. Refer to the Company's response to OCA 1-75(d). In the Company's view, is the use of rate design to maximize benefits unrelated to utility costs consistent with NH state law and regulatory practice? Please explain in detail.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 5

1. Advertising Expense. Refer to the response to OCA 3-5.
a. Explain the reason for the increase in spending in 2022 over the 2021 level.
b. Explain the reason for the decrease in 2021 spending over the 2020 level.
Advertising Expense. Refer to Schedule RR-2.8, line 4 and the response to OCA 3-5. Explain why the Company expects advertising expense to increase in each of the rate years, when the costs have fluctuated historically.

2. Affiliate charges. Refer to OCA 3-4 Attachment. Provide a breakdown of the "remainder" costs by category. Also explain why it is appropriate to escalate affiliate charges using general inflation factors.

3. Event Expense. Refer to the response to OCA 3-42. Provide a detailed explanation of the events included in the 2022 expense.

4. Board of Directors Expense. Please refer to Rule Puc 1604.01(a)(14), the response to DOE 4-54 and the response to OCA 3-6. Please reconcile the 2022 amounts shown and provide the total amounts included for recovery in the adjusted test year and each of the rate years.

5. Capital Expenditures. Refer to the response too OCA 3-9. Explain the reasons for the large increase in discretionary spending in Rate Years 2 and 3 over the prior years shown (with the exception of 2022).

6. Capital Expenditures. Refer to the response too OCA 3-9.
a. Explain the reason for the decline in spending in Rate Year 1 over the prior years.
b. Explain the reason for the increase in spending in Rate Years 2 and 3 over Rate Year 1.

7. Capital Expenditures. Refer to OCA 3-8 Attachment.
a. Provide the budget to actual data in the same format for 2017.
b. Explain the reason for the decline in total budgeted spending for CY 2023 over the prior years.

8. Capital Expenditures. Refer to the responses to OCA 3-8 and 3-9. Explain and reconcile the differences in the actual amounts shown on the two documents.

9. Capital Expenditures. Refer to the response to OCA-3-10. Provide the total company cost of the SAP project in 2022 and the amount and percentage allocated to Liberty Electric.

10. Contingencies. Refer to the response to OCA 3-16. For each of the years 2020, 2021 and 2022, provide a list of capital projects estimated to cost $1 million and above and the contingency amount and percentage included in each project estimate.

11. Contingencies. Refer to the response to OCA 3-16. For each of the years 2020, 2021 and 2022, for all capital projects estimated to cost $5 million and above provide the capital expenditure forms (including all drafts and revisions to the original project form) including the contingency amounts and contingency allowance calculations.

12. Cybersecurity investments. Refer to the response to OCA 3-31. Provide a list of each entity that will be allocated cybersecurity costs and their respective percentage for each of the rate years.

13. Cybersecurity investments. Refer to the response to OCA 3-31. Will the cybersecurity capital investments be included under the Company's discretionary category of capital spending? If not, state which category that they will be included.

14. Cybersecurity expense. Refer to the response to OCA 3-26. Please update the attachment to specify which amounts are capital and expense.

15. Cybersecurity expense. Refer to the response to OCA 3-31. Provide the Rate Year 3 amount of O&M expense.

16. D&O Insurance Expense. Refer to the responses to OCA 3-34 and DOE 4-37. Confirm that the amounts in OCA 3-34 have been allocated to Liberty and are included for recovery in the rate years. If not, identify the schedules where the amounts have been excluded.

17. Incentive Compensation. In what possible scenarios would the Company pay no incentive compensation to any employees (in other words no incentive compensation payments would be made by the Company in that year)?

18. Incentive Compensation. Response to OCA 3-50. Refer to the table on page 2.

a. For each of the three plans, provide the percentage that relates to financial goals.

b. For each of the three plans, provide the dollar amount that relates to financial goals.

19. Industry Organizations. Refer to the response to DOE 4-41.c. For each of the organizations listed, provide an explanation how the costs benefit ratepayers.

20. Industry dues. Refer to the response to OCA 3-36.

a. Provide a breakdown by entity of the amounts included in the $12,000 "Other."

b. Explain what the $1,800 booked to non-dues and memberships account relates to.

c. Provide the EEI lobbying amount booked below the line and the account number.

21. Legal expense. Refer to the response to OCA 3-68.

a. Explain the reason for the decrease in legal fees in 2020 over the other years shown.

b. Explain the nature of legal services provided by Pastori Krans PLLC.

c. Explain the reason for the increase in Pastori Krans PLLC fees in 2021 and 2022 over the other years shown.

22. Other revenues. Refer to Schedule RR-2.3 line 5 and the response to OCA 3-76. Provide a breakdown of the amounts on line 5 by pole rental and tower revenue for each of the years 2018, 2019, 2020, 2021 and 2022.

23. Outside Contractor Expense. Refer to OCA Attachment 3.15. b. Provide historical amounts in the same format for each of the years 2018, 2019, 2020, and 2021.

24. Pole Attachment Fees. Refer to page 15 of the Settlement Agreement in DE 19-064. Provide the pole attachment rates by type of pole for each of the years in each of the years 2018, 2019, 2020, 2021, 2022 and 2023.

25. Pole Attachment Revenue. Refer to the response to DOE-2-2. Explain why the Company is not proposing to adjust rent from electric property (account 454) in the rate years.

26. Plant in service. Refer to OCA 3-93 Attachment. Provide the same information for calendar year 2017 and the 13-month average for 2017.

27. Plant Additions. Refer to RR-6 (II-386).

a. Provide the 13-month average actual plant additions for each of the years 2017, 2018, 2019, 2020, 2021, and 2022.

b. Provide the actual plant additions for each of the calendar years 2017, 2018, 2019, 2020, 2021, and 2022.

c. Provide the 13-month average forecasted interim period plant additions.

d. Provide the forecasted interim period plant additions.

28. Plant Additions. Refer to the response to OCA 3-95. For the blanket project additions shown, provide by account number comparable historical actual additions for each of the years 2018, 2019, 2020, 2021 and 2022.

28. Payroll. Refer to the response to DOE 4-17.a. Of the $5,799,708.56, requested for recovery in the rate years, provide the total dollar amount for employees that have not yet been hired.

29. Severance Expense. Refer to the response to OCA 3-110. Does the Company have any plans to eliminate any positions in the rate years? If so, please provide a detailed explanation.

30. SERP.

a. Refer to the response to OCA 3-105 Attachment. Please explain and provide supporting calculations and documentation for the adjustment shown.

b. Provide the allocated SERP expense for each of the years in each of the years 2018, 2019, 2020, 2021 and 2022.

31. SERP. Refer to the response to OCA 3-105 and DOE 4-36. Confirm that the amounts in OCA 3-105 are included for recovery in the rate years. If not, identify the schedules where the amounts have been excluded.

32. Vegetation Management (IVM). Refer to Table 3 in Green/Sparkman Testimony (Bates II-545). Are the amounts shown included in Schedule RR-3.12 (Bates II-348) If so, please reconcile the amounts in Table 3 with Schedule RR-3.12

33. Vegetation Management. Refer to Attachment OCA 3-133.1, pages 3 and 4 of 28. Explain what is meant by "Pending PUC Adjustments."

34. Vegetation Management. Refer to the response to OCA 3-133. Provide a description of the services to be provided by Ai-Dash and provide a copy of the contract.

35. Vegetation Management. Refer to the response to OCA 3-133. Provide a description of the services to be provided by Terra Spectrum and provide a copy of the contract.

36. Vegetation Management. Refer to the response to OCA 3-133, Attachment 3-133.1.

a. Confirm that the contract amount is $9,012,924 for the period 2021-2024.

b. Provide a copy of the contract the Company had with Asplundh prior to executing the current contract.

37. Vegetation Management. Refer to the response to OCA 3-133.2. Provide the total dollar amount of the contract amendment with Lakeside Environmental Consultants.

38. Vegetation Management. Refer to the response to OCA 3-136. Where historic costs were used as the basis, provide the annual historical costs by category shown for each year 2018, 2019, 2020, 2021 and 2022.

39. Vegetation Management. Refer to the response to OCA 3-136. Have the three work planners been hired? If not, when will these positions be filled?

40. Vegetation Management. Refer to the response to OCA 3-136. Provide documentation supporting for the hazard tree removal ($437,500 * 2) and herbicide cost ($69,210) amounts shown (contracts, quotes, invoices, prior spending, etc.)

41. Vegetation management. Refer to the response to OCA 3-127.

a. Provide a copy of the contract referenced with Consolidated Communications.

b. Has the Company investigated any alternatives to recover these amounts from Consolidated Communications? If not, explain why not. If so, please explain in detail.

c. Provide the contributions received from Consolidated Communications for the shared vegetation management costs for each of the years 2015, 2016, 2017, 2018 and 2019.

42. Vegetation Management. Refer to the response to OCA 3-128. Explain the reasons for the decreases in traffic detail expense in 2020 and 2021 over the other years shown.

43. Vegetation Management. Refer to the response to OCA 3-129. Will the Company utilize internal staff or outside contractors for the herbicide and mowing applications? If internal staff will be used, has the Company filled the positions? If not, when does the company anticipate hiring the staff? If a contractor will be used, has the contractor been selected? If so, provide a copy of the contract. If not, when will one be selected?

44. Vegetation Management – Tree Removals. Refer to the response to OCA 3-124. Provide documentation (quotes, invoices, contracts, etc.) supporting the rate year costs requested for recovery.

45. Vegetation management. Refer to OCA 3-8 Attachment.

a. Vegetation management is listed under the discretionary capital projects category in some years. Explain why.

b. Does the Company consider O&M vegetation management to be a discretionary expense? If so, please provide a detailed explanation. If not, explain why not.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 6

1. Workpapers. Please provide live Excel versions of all spreadsheets associated with the Testimony and Attachments filed in the docket on May 5, 2023, in the above-captioned matter.
2. Workpapers. Refer to OCA 1-63 Attachments. Please provide live Excel versions of all spreadsheets associated with the results provided in Attachment 23-039 OCA 1-63c and Attachment 23-039 OCA 1-63d, clearly documenting all data and calculations underlying these results.
3. Marginal cost study. Refer to the direct testimony of Melissa Bartos. Please provide the complete marginal cost study in live Excel format with all formulae intact.
4. "Time Choice Plus" TOU rate. Refer to the response to OCA 1-56.
    a. In Liberty's view, why has enrollment been limited to 500 residential and 200 small commercial customers?
    b. Did Liberty anticipate greater enrollment of residential and/or small commercial customers than it has achieved? Please explain.
    c. What, if any, lessons has Liberty learned from the design and/or deployment of the "Time Choice Plus" rate in Missouri that it has incorporated or will incorporate into its plans for the proposed TOU rates in New Hampshire?
    d. Does Liberty anticipate a higher proportional enrollment in its proposed TOU rates in New Hampshire than it has so far achieved in Missouri? Please explain.
5. Evaluation, measurement, and verification. Refer to the direct testimony of Greg Tillman.
    a. Does Liberty have specific targets or other measurable goals for its D-TOU and G-3-TOU rates? Please explain.
    b. Does Liberty have any plans for evaluating the success of its proposed TOU rates in New Hampshire? Please explain in detail.
    c. How will Liberty determine if it has been successful in achieving its goals for the D-TOU and G-3-TOU rates? Please explain in detail.
    d. How will Liberty determine whether any modifications are necessary to the design of D-TOU and G-3-TOU? Please explain in detail.
6. Customer education. Refer to the direct testimony of Greg Tillman, page 14.
    a. How will Liberty determine if it has been successful in its customer education efforts relating to D-TOU and G-3-TOU? Please explain.
    b. Under what circumstances would Liberty make modifications to its TOU customer education plan once commenced? Please explain.
7. TOU generation costs – workpapers. Refer to pages 18–20 of the direct testimony of Greg Tillman. Please provide workpapers in Excel format, with all formulae intact, documenting the calculations described in the referenced section associated with determining time-differentiated

generation costs for the proposed D-TOU and G-3-TOU rates. Please include in the response clear documentation of the following analytical steps, which are described in the cited section, and please specifically denote each of the below steps in the response using the associated letter (a-h).

a. Determination of total generation costs to be recovered for an annual period based on the default energy service charge multiplied by the total kWh.
b. Differentiation of the default energy service costs into its two main components: (1) the capacity component, and (2) the energy, or non-capacity, component.
c. Estimation of the non-capacity generation costs for each class based on the forecast monthly LMP forwards and class loads.
d. Assignment of energy costs to TOU periods based upon the marginal cost per hour of energy service, by multiplying the hourly loads for the particular class and the market clearing price across each hour of the rating period.
e. Calculation of the ratio of the marginal energy cost falling into each TOU period for the rating year.
f. Assignment of the total energy cost recovery across the time periods using the ratios calculated in (e) to calculate the differentiated non-capacity costs for each period.
g. Determination of the capacity related generation costs for each class based upon forecasted forward capacity market charge rates, as estimated by ISO-NE by the Installed Capacity Tag of each class.
h. Allocation of capacity related generation costs to Peak, Mid-Peak, and Off-Peak periods based upon a probability of peak analysis.

8. TOU transmission costs – workpapers. Refer to pages 20 of the direct testimony of Greg Tillman. Please provide workpapers in Excel format, with all formulae intact, documenting the calculations described in the referenced section underlying determination of time-differentiated transmission costs for the proposed D-TOU and G-3-TOU rates. Please include in the response clear documentation of the following analytical steps, which are described in the cited section, and please specifically denote each of the below steps in the response using the associated letter (a-b).
    a. Assignment of total monthly transmission costs to classes using class coincidence with the ISO-NE peak.
    b. Allocation of monthly transmission costs for each class to time periods based on the monthly probability of peak analysis.
9. TOU distribution costs – workpapers. Refer to page 24 of the direct testimony of Greg Tillman. Please provide workpapers in Excel format, with all formulae intact, documenting the assignment of distribution costs to the rate periods for the proposed D-TOU and G-3-TOU using the load squared method, as described in the cited section.
10. TOU distribution costs. Refer to page 21 of the direct testimony of Greg Tillman, lines 5-7. Please provide updated D-TOU and G-3-TOU rate designs wherein the distribution rate is only time-differentiated to the extent justified on a cost basis. Please provide workpapers in Excel format with all formulae intact documenting all calculations associated with this update to D-TOU and G-3-TOU.
11. Metering. Refer to the response to OCA 4-16.
    a. When does Liberty expect to know with certainty whether replacement of AMR meters with AMI meters will be necessary? Please explain in detail.
    b. What is the incremental cost of replacing an AMR meter with an AMI meter? If the answer to this question is not known with certainty, please provide an estimate and cite to any supporting information.

c. Did the Company consider making the D-TOU and G-3-TOU rates available only to those customers with AMI installed? Please explain.
d. Has the Company evaluated the ongoing cost implications of not replacing AMR meters with AMI meters, including continuing incremental meter reading costs? Please explain.

12. TOU rate design. Refer to the direct testimony of Greg Tillman, page 9. Please explain in detail how the proposals for D-TOU and G-3-TOU comport with the Commission's requirement, quoted in the cited section, that, "the 3:1 peak to off-peak ratio should represent an average ratio during a given year, not during any one season."
13. TOU rate design. Refer to the response to OCA 1-62, and specifically, to the reference to the Technical Statement Regarding Time-of-Use (TOU) Model. Please identify all differences between the TOU model methodology documented in this statement and the methods used to develop D-TOU and G-3-TOU.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 7

1. Battery Pilot Regulatory Asset Costs.

a. Refer to the response to OCA 3-101. Provide a copy of the Navigant/Guidehouse contract

b. Provide copies of the 2018 invoices listed on the attachment.

c. Provide copies of the invoices over $10,000 listed on the attachment.

2. SAP Project. Refer to DOE 2-7. State the month that the SAP project went live in 2022.

3. SAP Project. Refer to DOE 2-13.d Attachment. Confirm the 2022 SAP project that went live was “Wave 5.” If not, specify which wave it related to.

4. SAP Project. Refer to DOE 2-13.d Attachment. Provide the budget to actual costs for each wave implemented to date.

STATE OF NEW HAMPSHIRE

Before the

PUBLIC UTILITIES COMMISSION

Docket No. DE 23-039

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty

Request for Change in Distribution Rates

Data Requests of the Office of the Consumer Advocate to Liberty, Set 8

The following data requests are addressed to witness John J. Spanos and reference his pre-filed direct testimony.

1.Please confirm that all dollar amounts referred to in your testimony are nominal.

2. What rate(s) of growth in prices of materials do you assume, or are implied, in your forecasts of gross salvage?

3.What rate(s) of wage growth do you assume, or are implied, in your forecasts of costs of removal?

4.On page 36 of Attachment JJS-2, you state: "Typical service lives for overhead conductors and devices of other electric utilities range from 45 to 65 years." Please cite a public source supporting this statement.

5. At the end of the same paragraph referenced in the previous question, you state: "The current estimate reflects a 43-year life." Are you referring to the entire service life, or remaining service life as of 2022?

6. In the following paragraph, with reference to poles, towers, and fixtures, you state: "Most other electric utilities estimate lives between 45 and 60 years." Please cite a public source supporting this statement.

7. On page 43 of Attachment JJS-2, you write:

> The calculated accrued depreciation for each depreciable property group represents that portion of the depreciable cost of the group which would not be allocated to expense through future depreciation accruals if current forecasts of life characteristics are used as the basis for such accruals.

Does Column (6) in the table on page 49 represent "expense through future depreciation accruals"? Does book depreciation reserve, shown in Column (5), represent "calculated accrued depreciation for each depreciable property group"?

8. Again with reference to the table on page 49, composite remaining life is the quotient of Column (6) and annual accruals in Column (7). Does composite entire service life, then, equal

[(Column (5) + Column (6))/Column (7)], in keeping with total life depreciation? If not, please report composite preceding lives (before 2022) for each category of plant.

9. Please explain why the negative net salvage percents tend to be larger for the more costly, larger components of the distribution capital.