

STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION

In the matter of

Electric and Natural Gas Utilities

Docket No. DE 19-197

Development of a Statewide, Multi-Use Online Energy Data Platform

REBUTTAL TESTIMONY

OF

JAMES BRENNAN
FINANCE DIRECTOR

October 23, 2020

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I. INTRODUCTION

A. *Background*

Q. Please state your name, business address and current position.

A. My name is James Brennan. I am the Finance Director at the New Hampshire Office of the Consumer Advocate (OCA). My business address is 21 South Fruit Street, Suite 18, Concord, New Hampshire.

Q. Have you previously provided testimony in this proceeding?

A. Yes. On August 17, 2020, I submitted direct, pre-filed testimony. Please refer to that testimony for information about my background and experience. My direct testimony sets forth a comprehensive set of recommendations for addressing the issues the Commission must decide in this proceeding.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is respond to the direct, pre-filed testimony also submitted on August 17 (1) jointly by Thomas Belair, Riley Hastings, Dennis Moore, Justin Eisfeller, Kimberly Hood, and Jeremy Haines on behalf of Eversource and Unitil, and (2) jointly by Stephen R. Eckberg and Jason Morse on behalf of the Staff of the Commission. I will refer to the former as the “Eversource-Unitil testimony” and the latter as the “Staff Testimony.” My rebuttal of the Eversource-Unitil Testimony, and the proposal described in that testimony, is organized around a side-by-side comparison of the “Virtual Platform” approach suggested by Eversource-Unitil and the “External Integration Platform” strategy I recommended in my direct

1 testimony.¹ As to the Staff Testimony, I critique the “two phase approach” to designing,
2 building, and operating the platform that is recommended by witnesses Eckberg and Morse.

3 In my judgment, the proceedings in this docket as they have unfolded so far, which have
4 involved not just the submission of written testimony but also an extensive series of meetings as
5 well as ongoing discovery, have been inadequate. There has been no collaborative, expert
6 review of the extensive business requirements contained in the use cases developed by the
7 parties, nor is there any provision for a standardized expert analysis and documentation of the
8 August 17, 2020 proposals. These flaws present an obstacle to stakeholders, and ultimately to the
9 Commission, to forming common understandings of complex materials and critical decision
10 points. Therefore, my discussion of the Staff testimony includes a recommendation to expand the
11 proceeding, based on the recommendations in my direct testimony, to convene collaborative,
12 technical working groups tasked with producing standardized analyses and understandings of the
13 concepts, proposals, and visions stakeholders have so far introduced.

14 I conclude my rebuttal testimony by noting the existence of significant areas of agreement
15 among the parties. The expert collaboration I propose as an alternative to Staff’s two-phase
16 approach, would kick-start progress toward compliance with the directive in RSA 378:52, I for
17 the utilities to “design and operate” a data platform. Within that framework, “build” is an
18 obvious and necessary step that would occur between “design” and “operate.” My rebuttal

¹ See Bates pages 55 to 61 of my direct testimony -- Section II.G, titled “External Integration Strategy – Least Cost.”

1 testimony assumes a collaborative process drive the creation of New Hampshire’s final data
2 platform. But I do not imply that the utilities will necessarily build part or all of the platform.

3 **Q. Are you providing diagrams to illustrate your areas of concern with the Eversource-Unitil**
4 **“virtual platform” and your recommended changes to Staff’s two-phase approach?**

5 A. Yes. Figure 1 is entitled “Critical Comparison Areas: OCA vs Eversource-Unitil (Side by Side)”
6 and Figure 2 is entitled “2021 Expert Working Groups & Consensus Deliverables added to Staff
7 2 Phase Approach.”

8 **Q. Are there any terms you wish to introduce, define or clarify for purposes of your rebuttal**
9 **testimony?**

10 A. Bates pages 11 through 22 of my direct testimony define with precision a series of terms used in
11 that testimony. When used here in my rebuttal testimony, those terms have the same meaning.

12 **II. The Eversource-Unitil Virtual Platform**

13 ***A. Obstacles Limiting Comparison and Discussion of Platform Ideas*** 14 ***and 19-197 Proposals***

15 **Q. What obstacles exist that limit discussion and comparisons of proposals introduced in the**
16 **direct pre-filed testimony?**

17 A. A range of information and documentation normally used in the process of making a fully
18 informed and robust comparison of technical proposals submitted by the parties to this docket
19 does not exist. Discussion and comparisons of the proposals is therefore limited.

20 **Q. What information is missing?**

21 A. A standardized body of analysis, performed by subject matter experts, explaining and

1 documenting the proposals is required. An impact analysis comprised of standardized
2 accurate informative documentation, comparison matrices, short term and long term capabilities
3 mapping to 100+ use cases and business requirements, is needed in order to understand the
4 relatively unstructured and highly complex body of evidence contained in the prefiled direct
5 testimony.

6 **Q. How does a lack of standardized impact analysis affect stakeholder dynamics in this**
7 **docket?**

8 A. Assessing the raw and often hidden complexity of information technology embedded or implied
9 within proposals requires broad and deep technical knowledge. The lack of proper
10 documentation to explain proposals in a systematic, methodical manner has largely prevented a
11 common set of understandings to develop among the diverse body of stakeholders represented in
12 this proceeding. “Talking past one another” is an expression some parties have used to describe
13 unproductive discussions. The lack of structured expert analysis and documentation leads to
14 frustration attempting to connect the language of RSA 378:50 to the world of technology and
15 digital data platforms.

16 **Q. How does a lack of standardized impact analysis affect your rebuttal testimony?**

17 A. In responding to the testimony of Eversource-Unitil and Staff, my conclusions may change based
18 on information that may emerge from analysis and collaborative discussions in the future. I will
19 note here that notwithstanding arguments I make in the next section, a collaborative analytical
20 effort to merge strategic synergistic portions of existing stakeholder recommendations, none of
21 which is cast in stone or final, is feasible and would lead toward the creation of an excellent
22 statewide data sharing platform.

1 ***B. A preliminary, side-by-side comparison of the Eversource-Unitil and***
2 ***OCA proposals***

3 **Q. What information did you rely on in your comparison analysis?**

4 A. My analysis is based on information in the pre-filed testimony filed on August 17, 2020, the Set
5 1 and Set 2 discovery responses, information gleaned informally during technical sessions, and
6 other materials filed with the Commission and/or circulated informally during the course of this
7 proceeding so far.

8 **Q. Is there any information you have requested but not received?**

9 A. Yes. First, the OCA asked the Eversource and Unitil to provide Unified Modeling Language
10 (UML) sequence diagrams documenting how their proposed virtual platform works, and to
11 present the information in a similar format to the OCA Use Cases (appearing in OCA's Use Case
12 Proposal filed on 4/6/2020²), to facilitate an apples-to-apples comparison. The utilities objected
13 to this request. *See* Appendix 1 Eversource-Unitil response to OCA 1-001 with original DR
14 attachment. Second, the OCA has submitted Set 3 discovery questions requesting information
15 on the utility Customer Engagement Platforms integration model. Third, the OCA has submitted
16 a data request asking the utilities to describe their future strategy relative to their customer
17 engagement platforms and the multi-use data platform contemplated by this docket and RSA
18 378:50 to :54. The due date for set 3 data responses occurs after the filing date for rebuttal
19 testimony.

² OCA's Use Case Proposal can be found here https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-197/LETTERS-MEMOS-TARIFFS/19-197_2020-04-06_OCA_USE_CASES_PROPOSALS.PDF

1 **Q. What are "critical comparison areas" relative to comparing OCA vs Eversource Unitil**
2 **Proposals?**

3 A. Critical comparison areas are those that define: (a) how a proposed platform would meet key
4 requirements of sections 50 through 54 of RSA 378, and (b) design points that can allow the
5 platform to evolve with anticipated, growing data needs in the realms of energy efficiency, grid
6 modernization, and market innovation, often referred to by the parties as "future-proofing." I
7 have identified five critical comparison areas. (1) the "logical data model" required by RSA
8 378:51, I(d), (2) the "common base of energy data" required by RSA 378:51, I(a), (3) the
9 centralized data access point as required by RSA 378:52 I, (4) Data Interoperability, which is a
10 key goal of the data platform, and (5) Green Button functionality as required by RSA 378:53.
11 Figure 1, "Critical Comparison Areas: OCA vs Eversource-Unitil (Side by Side)," shows these
12 five critical comparison areas and includes a total of eleven specific comparison points, labeled
13 A through K.

14

1 **Figure 1 Critical Comparison Areas: OCA vs Eversource-Unitil (Side by Side)**
2

Critical Comparison Areas: OCA vs Eversource - Unitil (Side by Side)		
<u>Area 1: RSA 378:51, I (d) data model</u> Adhere to common statewide logical data model [LDM] that defines the relationships among various categories of data included in the platform		
	OCA	ES-Unitil
	External Integration	Virtual Integration
A LDM is based on model initiated in DE 16-384 DWG (NEEDS)	Yes	Yes
B LDM can define system data in later phases (extendible / futureproof)	Yes	?
C LDM can define non-utility data in later phases (extendible / futureproof)	Yes	?
<u>Area 2: RSA 378:51, I (a) common base</u> consist of a common base of energy data for use in a wide range of applications and business uses		
	OCA	ES-Unitil
	External Integration	Virtual Integration
D Data distributed across NEEDS-Statewide and NEEDS Client databases	Yes	No
E Data decentralized in existing utility back office system databases	No	Yes
<u>Area 3: RSA 378:52, I provide access</u> Data sharing means providing data and accessing data		
	OCA	ES-Unitil
	External Integration	Virtual Integration
F Centralized API	Yes	Yes
<u>Area 4: Data Interoperability approach</u> Technical ability of separate systems to exchange information with each other		
	OCA	ES-Unitil
	External Integration	Virtual Integration
G Some data externally integrated to achieve statewide datasets (1)	Yes (index data)	No
H Some data externally integrated enables utility & non-utility in single dataset (2)	Yes (index data)	No
I API of APIs approach integrates data as stored in existing utility back office sys	No	Yes
<u>Area 5: RSA 378:53 green button</u> Green Button Connect My Data functionality		
	OCA	ES-Unitil
	External Integration	Virtual Integration
J Centralized statewide Green Button platform	Yes	No
K Multiple utility by utility Green Button platforms	No	Yes
Notes-		
1. statewide functionality: multi commodity data (electric, gas, water) and multi utility data (multi franchise) in single dataset		
2. utility and non-utility data integration allows total building energy data reporting, all endpoints, in a single dataset		

3

4

1 **Q. Before you discuss differences, are there any important areas of agreement between OCA's**
2 **proposed External Integration model and the Eversource-Unitil Virtual Platform?**

3 A. Yes, there are two major areas of agreement dealing with data models and API which I will
4 briefly discuss. As noted in Row A of Figure 1, Eversource and Unitil agreed to base the data
5 model on the initial work conducted by the working group convened pursuant to the settlement
6 agreement in the 2016 Unitil electric rate case (Docket No. DE 16-384). This is consistent with
7 the External Integration Platform strategy proposed in my direct testimony. Second, with
8 reference to Row F of Figure 1, Eversource and Unitil would provide all data access via a
9 centralized API. This is consistent with the External Integration Platform strategy proposed in
10 my direct testimony.

11 **Q. With respect to the statutory requirement of a “common base of energy data,” how does**
12 **your proposal compare to the Eversource-Unitil approach?**

13 A. We disagree on the important question of how and where the “common base of energy data” is
14 realized. Looking at row E of Figure 1, the utilities’ virtual platform maintains all data in
15 separate existing IOU back office system databases. *See* Appendix 2 Eversource-Unitil response
16 to OCA 1-007. Subject to further analysis and documentation, my concerns about this approach
17 include: (1) potential issues relying on data silos (2) potential difficulties extending the
18 platform’s “common base of energy data” to include non-utility data sources such as non-utility
19 owned meters, distributed energy resources, etc., and (3) lost benefits associated with External
20 Integration.

21 With respect to the virtual platform’s use of legacy utility back office system databases,
22 please refer to row D of Figure 1. The proposed External Integration Platform model provides a

1 “common base of energy data” based on an architecture of distributed and standardized database,
2 referred to in my direct testimony as NEEDS Client databases and a NEEDS Statewide database.
3 In particular, see Figure 11 in my direct testimony (entitled “Proposed Build (Including Design
4 Pilot Scope)” on Bates page 94 of that document.

5 **Q. What are your concerns with the Eversource-Unitil “API of APIs” approach to creating a**
6 **statewide data sharing platform?**

7 A. Looking at row I in Figure 1 above, the Virtual Platform proposes an API of APIs approach to
8 integrating data in its current state – i.e., data stored separately, by each of the utilities, in
9 existing back office utility systems. Of concern is the fact that the API of APIs concept, for a
10 statewide multi utility use case, has not yet been designed or tested, *see* Appendix 4, Eversource-
11 Unitil response to OCA 2-001 (“The implementation mechanics of the pre-assembly have not yet
12 been designed or specified”), and no such implementation of a multi utility API of APIs model
13 exists in the United States, *see* Appendix 3 Eversource-Unitil response to OCA 1-024 (“We are
14 unaware of any other states that have implemented a model that precisely matches the strawman
15 proposal”). My second concern is that the API of APIs approach would have difficulty evolving
16 to a truly statewide energy resource, a “central source of truth”³ that enables innovation and grid
17 modernization. For New Hampshire’s data platform to meet the evolving data needs of grid
18 modernization, energy efficiency, and new markets, the “common base of energy data”

³ “Central source of truth” is a quotation from “OCA Use Case Core-06: Statewide Index” which is included within OCA Use Case Proposals filed on 4/3/2020 at Bates page 27. It states an aspiration that energy data shared by the platform be managed statewide, not utility by utility. Specifically, “central source of truth” defines a trait of the data platform whereby all New Hampshire customers, meters, locations, devices are organized and identified by an immutable unique ID. OCS’s Use Case Proposal can be found here https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-197/LETTERS-MEMOS-TARIFFS/19-197_2020-04-06_OCA_USE_CASES_PROPOSALS.PDF

1 referenced in RSA 378:51, I(a) will also need to evolve so that it is capable of generating single
2 datasets of all energy data for buildings and locations including energy data from non-utility
3 sources (non-utility owned DERs and devices) for all New Hampshire energy metering
4 endpoints.

5 Concerning the Virtual Platform’s reliance on existing utility back office systems to build
6 a data platform of the future, please refer to rows G and H of Figure 1 above. The proposed
7 External Integration Model, which is based on widely used practices in all industries, including
8 the electric distribution utility industry,⁴ offers benefits that are summarized in Notes 1 and 2 at
9 the bottom of Figure 1. Specifically, the External Integration Model can be extended to provide a
10 “common base of energy data” that supports (1) statewide functionality – i.e., multi commodity
11 data (electric, gas, water) and multi utility data (multi franchise) in a single dataset, and (2)
12 utility and non-utility data integration that would allow total building energy data reporting for
13 all endpoints in a single dataset. External Integration provides provide a proven well known
14 technology path toward a more robust more multi-use, multi-utility statewide platform.

15 **Q. How does the Eversource-Unitil proposal compare to your approach on the question of**
16 **compliance with the Green Button standard?**

17 A. Looking at row K of Figure 1, the Virtual Platform means that each utility would design, build
18 and operate its own separate Green Button platform. That’s clear with reference to Figure 2 at
19 page 18 of the Eversource-Unitil direct testimony. My concern is duplication of effort and data

⁴ The benefits of external integration in the electric distribution utility industry are discussed by EPRI (the Electric Power Research Institute) as part of documentation of the Common Information Model (CIM), as discussed in my direct testimony.

1 quality issues that have been documented in decentralized utility by utility Green Button data
2 sharing models. Data quality issues are discussed in my direct testimony in the section entitled
3 “Data Sharing Influence from Utilities and Regulators in Other States” at Bates pages 33 to 37.
4 The vision of the Statewide Multi-Use Online Energy Data Platform adopted in statute last year
5 was to solve these well-known and costly problems using a centralized statewide multi-use data
6 platform.

7 Please also reference row J of Figure 1. The proposed External Integration Platform
8 supports creation of a single centralized statewide Certified Green Button platform. In addition to
9 reduced data quality risks discussed in my direct testimony in section “Data Sharing Influence
10 from Utilities and Regulators in Other States”, the advantages of the centralized Green Button
11 model include economies of scale that result in cost savings from creating one data platform,
12 operating one data platform, and governing one data platform instead of creating, operating and
13 governing multiple duplicate platforms. Economies of scale associated with a centralized Green
14 Button Platform are discussed in OCA’s Scoping Comments in Section VI. “Costs Benefits” at
15 page 12, and in my direct testimony at Bates page 60 lines 11-19.

16 There are well-known and well-documented issues experienced in the utility-specific
17 model of data access. Utility-specific data access mechanisms are more expensive on a statewide
18 basis because there are no economies of scale. Work effort and infrastructure are duplicated by
19 each utility’s implementation. States that have implemented utility-specific data access
20 mechanisms have documented issues with inconsistent data across platforms. The result of
21 inconsistent data is loss of interoperability on a statewide basis. The cost to resolve data

1 consistency issues is significant, with examples in the tens of millions dollars.⁵

2 ***C. Summary - Bridging the Gap***

3 **Q. What is your opinion as to the size of the gap that exists between OCAs External**
4 **Integration Platform versus the Eversource-Unitil Victual Platform?**

5 A. In my opinion the gap is smaller than it appears and is resolvable. The various parties have
6 indicated their August 17, 2020 proposals are conceptual and agree there are numerous technical
7 approaches that could work while still meeting an agreed set of goals and visions that
8 stakeholders have expressed in this docket. There is a great degree of hidden commonality of
9 ideas that, with proper steps, be can be leveraged to efficiently resolve and bridge remaining
10 gaps.⁶ In my opinion, parties to this docket agree on foundational concepts concerning the
11 development and adherence to a statewide data standard, and agreement that the platform should
12 be statewide. If this is true, what remains, and what is viewed a large gap, is the task of coming
13 to terms on how to implement these two common ideas. In technology, there are many ways to
14 reach a goal such as a platform proposal that is a collection of ideas that have been altered from
15 their original state to a middle ground that still meets the needs of all interested parties. Closing
16 the gap and finding the middle ground occurs through expert collaboration using basic IT
17 blocking and tackling steps that I propose in the next section of my testimony.

⁵ OCA's March 11, 2020 Scoping Comments can be found here: https://www.puc.nh.gov/Regulatory/Docketbk/2019/19-197/LETTERS-MEMOS-TARIFFS/19-197_2020-03-11_OCA_SCOPING_COMMENTS.PDF

⁶ In assessing the feasibility of bridging a gap I am addressing technology issues, and not directly addressing gap in governance or utility regulatory model issues.

1 **III. The Staff Two-Phase Approach**

2 **A. Pathway to the RSA 378:52, I “design” stage**

3 **Q. What basic steps would you recommend the data platform governance body consider**
4 **relative to starting the RSA 378:52 I. “design” stage?**

5 A. As I have already noted, in my opinion the reference to “design” in RSA 378:52, I implicitly
6 includes a “build” phase – because, obviously, the process of building the platform must occur
7 between the platform design and the platform operation explicitly mentioned in the statute.
8 From a high level, and mindful of work already completed in this docket, design-build can be
9 viewed as the last step in a five step process in which steps one and two are completed but the
10 other steps remain in the future.

11 **Q. Define step one and step two of the pathway which you say are completed.**

12 A. The first two steps already completed within the procedural schedule of the docket are (1) the
13 Parties submitted uniquely formatted use cases describing their desired platform vision and
14 business requirements, and (2) the Parties submitted uniquely formatted conceptual platform
15 proposals with varying levels of technical documentation.

16 **Q. Define step three and step four of the pathway that you say are missing.**

17 A. Step 3 utilizes subject matter experts to produce standardized written analysis of business
18 requirement, as defined by use cases submitted by parties, and written analysis of proposals, as
19 currently described in party testimony. Step 3 deliverables include business oriented
20 documentation and technical artifacts such as diagrams, matrices, comparison tables, etc. The
21 analysis will be informative as to each proposal’s level of future-proofing based on use cases it

1 may or may not support in current or future phases. Combined, step 3 will allow an apples to
2 apples comparison of proposals and their unique impact on customers, utilities and the New
3 Hampshire energy economy.

4 Step four is based on the standardized analysis performed in step three intended to arrive
5 at consensus on important scope and threshold issues. Step four, which may occur in parallel to
6 step three, is a collaborative effort by experts that includes discussion and modification of initial
7 proposals. Step four produces documentation of consensus middle ground on scope and
8 threshold issues. The documentation is used to inform broader stakeholders and the Commission.

9 **Q. Define step five: “design-build.”**

10 A. Step five is the actual design and build phase and is properly regarded as a traditional IT project
11 following a well-established development life cycle including agile development methods,
12 testing, piloting, change management, and launch. Step 5 is entirely dependent on the work of
13 prior steps and should not begin until these pre-requisite tasks are completed and approved.

14 **Q. What is your understanding of the Staff Two-Phase Approach?**

15 A. Under the proposed approach of Staff, phase one is a determination of “threshold issues”
16 identified in RSA 378:51-53, scoping comments, and comments from parties. While threshold
17 issues are not specifically identified in the Staff testimony, Staff has indicated that the selection
18 of a data platform design strategy (e.g., the OCA External Integration Platform versus
19 Eversource-Unitil Virtual Platform), is a Phase One threshold issue. *See* Appendix 5 Staff
20 response to OCA 1-003. In addition, the Staff testimony states that in Phase One “party
21 testimony will address the many technical issues discussed for and would inform a Commission

1 decision in the first phase of this docket on a platform scope and corresponding technical
2 requirements.” See Staff Testimony at Bates page 6 lines 9-12.

3 **Q. What is your reaction to Phase One of Staff’s Two Phase Approach?**

4 A. In my opinion, “party testimony,” which has not been analyzed systematically and documented
5 is inadequate to inform the Commission fully because it has not undergone the processes I have
6 previously described as steps three and four.

7 **Q. What is your understanding of Phase Two of the Staff approach?**

8 A. According to the Staff testimony at lines 14-15 on Bates page 6 Phase Two is “an initial order
9 from the Commission on platform scope and other threshold issues resulting from the first phase
10 of the docket.” Phase Two calls for an RFI / RFP process following the order and will inform the
11 Commission’s ultimate determination of cost, public good and, thus, whether the project should
12 be commenced or deferred pursuant to RSA 378:51, III.

13 **Q. What is your reaction to Phase Two of Staff’s Two Phase Approach?**

14 A. In my opinion, the Commission would need further information to issue an order on scope and
15 threshold issues. If Staff’s rubric for resolving this case were adopted, Phase Two would rely on
16 Phase One – but the necessary systematic expert analysis would not be performed in Phase One.
17 As I have previously discussed above, the parties’ testimony and use cases have not been
18 analyzed and documented in a systematic fashion by subject matter experts. For the same
19 reasons, there is inadequate information to commence an RFI / RFP process to determine cost
20 when scope and threshold issues have not been fully analyzed.

1 ***B. Summary and Proposed Modification to Staff Approach***

2 **Q. What is your recommended modification to the Staff Two Phase Approach?**

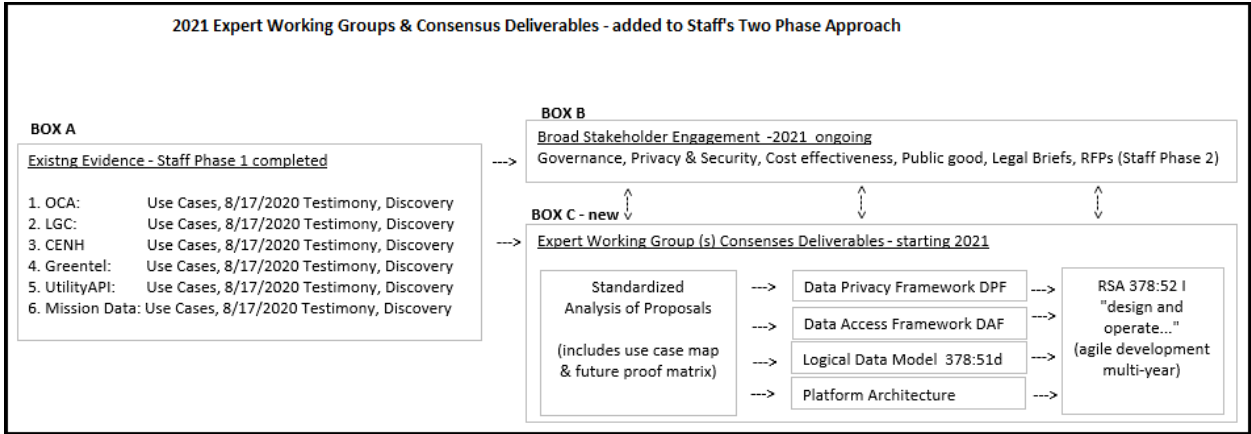
3 A. My recommendation is to augment Staff’s Phase One with necessary analysis and policy
4 documentation that is required prior to commencing the Phase 2 RFP process. Specifically, I am
5 recommending addition of the tasks that are shown in Box C of Figure 2 (“2021 Expert Working
6 Groups & Consensus Deliverables”) to augment Staff’s Phase One. This suggestion of
7 additional expert deliverables and policy documentation is based on my prior recommendations
8 made in my direct testimony on Bates pages 95-97. My recommendation to augment Staff Phase
9 One is also consistent with the proposed step three and step four that I have outlined earlier in
10 my testimony in the section discussing a pathway to the RSA 378:52, I “design” stage.

11 **Q. Please elaborate on Figure 2, “2021 Expert Working Groups & Consensus Deliverables.”**

12 A. I am proposing the platform governance body consider the formation of an expert working
13 group(s), tasked with producing specific concrete consensus deliverables, as shown in Box C of
14 Figure 2.

15

1 **Figure 2: 2021 Expert Working Groups & Consensus Deliverables added to Staff’s Two Phase**
 2 **Approach**
 3



4

5 There are three boxes in Figure 2. Box A, entitled “Existing Evidence,” represents the current
 6 totality of work already performed in Docket DE 19-197 based on the existing procedural
 7 schedule. The work shown in Box A represents the completed work described as step one and
 8 step two that I discussed earlier in section “Pathway to the RSA 378:52, I “design stage”.

9 Box B, entitled “Broad Stakeholder Engagement,” represents the current on-going
 10 activities of parties and stakeholder involved in Docket DE 19-197. The activity includes, but is
 11 not limited to, exploration of major policy and governance issues. Activities in Box C will (1)
 12 occur under an agreed governance model, and (2) inform activities in Box B.

13 Box C, entitled “Expert Working Group(s) Consensus Deliverables – starting 2021,”
 14 reflects the formal working group(s) originally recommended in my direct testimony at Bates
 15 pages 95-97. The work falling within Box C would involve subject matter experts, tasked with
 16 creating specific agreed deliverables, represented by each of the six interior boxes. The five sets
 17 of deliverables would act as reliable consensus-based expert resources that would inform

1 stakeholders and the Commission on “scope and corresponding technical requirements “ as
2 referenced in the Staff testimony Bates 6 line 11-12.

3 **IV. Summary and Recommendation**

4 **Q. Please summarize your response to the testimony submitted by Eversource/Unitil and the**
5 **Commission Staff.**

6 A. RSA 378:52, I states the utilities shall “design and operate the energy data platform,” with the
7 design process implicitly including the building process as well. My direct testimony and this
8 rebuttal testimony include recommendations to inform the Commission of design concepts and
9 management steps to consider in reaching goals to design, build, and operate a successful data
10 platform.

11 In my rebuttal testimony I have provided a side by side comparison of my
12 recommendation to follow an External Integration Platform strategy vs a Virtual Platform model
13 proposed by Eversource-Unitil. While the differences in positions may appear significant and
14 stark, it is my opinion that there is a great degree of hidden commonality of ideas that, with
15 proper steps, be can be leveraged to resolve and bridge remaining gaps efficiently.

16 I have also responded to the Two Phase approach in the Staff testimony to express my
17 concerns that the lack of standardized expert analysis of complex material presented in the
18 docket so far cannot adequately inform the Commission of the merits of competing proposals.
19 Based on my assessment, I have proposed a modification to Staff’s approach intended to provide
20 reliable consensus documentation to inform the parties and ultimately the Commission.

21