#### COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Petition of NSTAR Electric Company d/b/a)Eversource Energy pursuant to G.L. c. 164, § 94)and 220 CMR 5.00, for Approval of a General)Increase in Base Distribution Rates for Electric)Service and a Performance-Based)Ratemaking Plan)

**D.P.U. 22-22** 

### DIRECT TESTIMONY OF KEVIN F. GALLIGAN ON BEHALF OF THE CAPE LIGHT COMPACT JPE

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1	I.	INTRODUCTION AND QUALIFICATIONS
2	Q.	Please state your name and business address.
3	A.	My name is Kevin F. Galligan. My business address is 22 Great Oak Road,
4		Orleans, Massachusetts.
5	Q.	What is your occupation?
6	A.	I am the president of Galligan Energy Consulting, Inc.
7	Q.	Please summarize your educational background and professional experience.
8	A.	I received a BS degree in Accounting and an MBA degree from Southeastern
9		Massachusetts University, now UMass Dartmouth, in June 1977 and 1980,
10		respectively. I received a BS degree in Mechanical Engineering Technology from
11		Northeastern University in June 1994. I was an analyst for the Algonquin Gas
12		Transmission Company, now Enbridge/Spectra, responsible for forecasting,
13		regulatory guidance through industry restructuring and engineering project
14		management of incremental pipeline capacity expansions until 2001. I was the first
15		energy efficiency program manager for the Cape Light Compact JPE (the
16		"Compact"), served seven years as a publicly appointed member to the
17		Massachusetts Energy Facilities Siting Board ("EFSB"), and taught twelve years in
18		the Environmental Technology Department at Cape Cod Community College. I am
19		a long-time resident of Cape Cod, I serve the Town of Orleans in appointed roles on
20		various committees and I am an elected Select Board member. Since 2012, I have
21		been a consultant in energy efficiency policy, planning, and project management in

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1		my current position at Galligan Energy Consulting. My recent work has involved,
2		among other things, the design, development, cost-effectiveness screening, delivery
3		and management of energy efficiency programs, including the program benefits and
4		bill impacts of utility efficiency programs. My resume is included as Exhibit CLC-
5		KFG-2.
6	Q.	Have you testified previously in utility proceedings?
7	A.	Yes. I have testified in Massachusetts on behalf of the Compact before the
8		Department in the last Eversource rate case (D.P.U. 17-05), and in support of six
9		energy efficiency plans of the Compact. I have also deliberated and acted on
10		fourteen cases decided by the EFSB. A summary of my prior testimony is included
11		as Exhibit CLC-KFG-3.
12	Q.	On whose behalf are you testifying in this proceeding?
13	A.	I am testifying on behalf of the Compact in this proceeding.
14	Q.	What is the purpose of your testimony?
15	А.	My testimony addresses my analysis of the rate design and bill impacts related to
16		the rate case petition by NSTAR Electric Company d/b/a Eversource Energy
17		("Eversource") in D.P.U. 22-22, as well as implications of Eversource's proposed
18		performance-based ratemaking ("PBR") metrics within the Compact's territory.

# Q. What materials submitted by Eversource did you review in order to prepare your testimony?

3 A. I reviewed the Petition for Approval of an Increase in Base Distribution Rates and 4 Performance-Based Ratemaking Regulatory Plan, D.P.U. 22-22, dated January 14, 5 2022 by NSTAR Electric Company d/b/a Eversource Energy (the "Initial Filing"). 6 Specifically, I focused on: the direct testimony of Craig Hallstrom and Douglas P. 7 Horton (Exh. ES-CH/DPH-1) along with the referenced Exhibits and Schedules; the 8 direct testimony of Digaunto Chatterjee, Lavelle A. Freeman and Gerhard Walker 9 (Exh. ES-ENG-1) along with the referenced Exhibits and Schedules; the direct 10 testimony of Penelope M. Conner, Diagaunto Chatterjee, Catherine A. Finneran and 11 Paul R. Renaud (Exh. ES-METRICS-1) along with the referenced Exhibits and 12 Schedules; direct testimony of Robert W. Frank and Ashley N. Botelho (Exh. ES-13 REVREQ-1) along with the referenced Exhibits and Schedules; direct testimony of 14 Leanne M. Landry and John G. Griffin (Exh. ES-ADDITIONS-1) along with the 15 referenced Exhibits and Schedules; direct testimony of Penelope M. Conner, 16 Douglas P. Horton and Jennifer A. Schilling (Exh. ES-AMI-1) along with the referenced Exhibits and Schedules; direct testimony of Bruce R. Chapman (Exh. 17 18 ES-ACOS-1) along with the referenced Exhibits and Schedules; and direct 19 testimony of Richard D. Chin (Exh. ES-RDC-1) along with the referenced Exhibits 20 and Schedules of the Initial Filing. I have also reviewed Eversource's responses, 21 including associated attachments, to the following information requests: DPU Set-22 2; DPU Set-7; DPU Set-11; DPU Set-12; DPU Set-13; DPU Set-15; DPU Set-17; 23 DPU Set-21; DPU Set-23; DPU Set-24; DPU Set-25; DPU Set-26; DPU Set-28;

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1	DPU Set-29; DPU Set-31; DPU Set-36; DPU Set-39; DPU Set-40; AG Set-5; AG
2	Set-8; AG Set-11; UMASS Set-1 and all CLC Sets.

#### 3 Q. Did you review any other materials in preparing this testimony?

A. I reviewed comments submitted by the public to the Department, listened to oral
comments made at public hearings and reviewed public hearing transcripts. I also
reviewed the Department's orders in D.P.U. 17-05, in particular D.P.U. 17-05-B
dated January 5, 2018 ("D.P.U. 17-05-B Order"), and in D.P.U. 21-106 dated
December 22, 2021, Eversource's fourth annual PBR adjustment for performance
year 2020.

10 Q. How is your testimony organized?

11 A. After this introductory section, my testimony is organized into three additional 12 sections. In Section II, Rate Design and Bill Impacts, I provide background on current economic conditions, including specific impacts on customers on Cape Cod 13 14 and Martha's Vineyard, describe Eversource's proposals, identify concerns, and 15 make recommendations on the rate design and bill impacts. In Section III, I 16 describe Eversource's proposals, identify concerns and make recommendations 17 regarding PBR metrics. Section IV contains my conclusion and a summary of my 18 recommendations.

1 2	Π	. RATE DESIGN AND BILL IMPACTS
2 3 4		A. BACKGROUND – THE CURRENT ECONOMY AND CAPE COD AND MARTHA'S VINEYARD DEMOGRAPHICS
5 6	Q.	Please describe the current economic climate facing ratepayers on Cape Cod and Martha's Vineyard?
7	А.	Currently, all ratepayers, including those on Cape Cod and Martha's Vineyard, are
8		facing significant economic challenges because of inflation and increased prices on
9		such necessities as gasoline, shelter, and food. In addition to those, Cape and
10		Vineyard ratepayers face numerous economic circumstances unique to its
11		demographics, including a considerable number of residents who are on fixed
12		incomes. Below, I detail these economic conditions faced by Cape and Vineyard
13		ratepayers to support my rate design recommendations that follow.
14		Generally, consumer prices in the United States continued to rise in
15		February and March 2022 even after inflation had hit a new 40-year high in
16		January. (Source: U.S. Bureau of Labor Statistics data released April 12, 2022 at
17		https://www.bls.gov/news.release/cpi.nr0.htm) The Consumer Price Index for All
18		Urban Consumers ("CPI-U") was up 8.5 percent compared to a year ago and is at
19		its highest level since December 1981. Increases in the indexes for gasoline,
20		shelter, and food were the largest contributors to the seasonally adjusted all items
21		increase, with the energy index up 32 percent over the prior year. The graph on the
22		following page of CPI: Food & Energy from 2012 to 2022 highlights this
23		significant trend.

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(Source: Boston Federal Reserve National Economic Summary at <a href="https://nationaleconomicsummary.bostonfed.org">https://nationaleconomicsummary.bostonfed.org</a>)
 Cape and Vineyard ratepayers are experiencing these economic conditions as well

as other challenges unique to their own economy and demographics, as I describe below.

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## 9 Q. Please provide some background on how Cape and Vineyard customers are 10 atypical in their electricity service needs?

11 A. Electric distribution service on Cape Cod and Martha's Vineyard is shaped by the 12 unique economy and demographics of businesses and residents. Specifically, the 13 robust seasonal tourist economy of the region is driven by business and hospitality 14 services. The Cape and Vineyard is home to many retirees who are away from 15 home during the winter and, as a result, use very little electricity during these 16 periods of the year. The demographics of the region include many electric 17 customers on fixed incomes who do not qualify for assistance programs, yet are 18 unable to afford increases in their utility bills. The Department has received

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1	numerous oral and written public comments in this proceeding from Cape and
2	Vineyard customers and stakeholders. These comments demonstrate the distinct
3	considerations, to more than 200,000 customer accounts on Cape Cod and Martha's
4	Vineyard, that Eversource must account for in order to provide reasonably priced
5	electric service to these ratepayers.

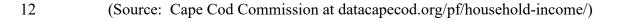
#### 6 Q. Are there other factors unique to Cape Cod and Martha's Vineyard?

A. Yes. The Cape is recognized for its beaches, resorts, and high end properties.
However, in 2019, Barnstable County's median household income of \$74,336 was

9 lower than the Commonwealth's as a whole (\$81,215), with significant variation at

10 the town level. The following graph illustrates this point:





13 Contrasting this low median household income ranking, Cape Cod and Martha's

14 Vineyard have some of the highest median home prices as of January 2021,

1	including Provincetown at \$1,355,679 and Edgartown at \$1,884,071, while the
2	median sales price statewide was \$445,000 in the same year. (Source: The Warren
3	Group at https://teamvantagepoint.com/ma-town-median-home-values/)
4	The Russian invasion into Ukraine, that began on February 24, 2022, has escalated
5	the prices of energy around the world and has highlighted the differential in the cost
6	of energy that Cape Cod and Martha's Vineyard consumers experience due to
7	delivered fuel transportation costs. The following table compares current prices of
8	gasoline for selected locations in Massachusetts and illustrates, with a statewide
9	average of \$4.12/gallon of regular gasoline, the higher prices paid on the Cape and
10	Vineyard with the range of prices from a low of \$3.59 in Seekonk to a high of \$4.85
11	in Chilmark on Martha's Vineyard. For a driver who uses 20 gallons per week this
12	differential compared to the statewide average is a burden of more than \$750 per
13	year.

Retail Gasoline Fuel Prices \$ per gallon period ending April 13, 2022

		Regular			
Location	Town	Gasoline	Source		
Statewide		\$4.12	https://www.mass.gov/info-details/massachusetts-auto-fuel-prices		
<b>Cumberland Farms</b>	Seekonk	\$3.59	https://www.gasbuddy.com/gasprices/massachusetts		
Stop & Shop	Springfield	\$3.77	https://www.gasbuddy.com/gasprices/massachusetts		
Cape Cod Farms	Dennis	\$4.19	https://www.gasbuddy.com/gasprices/massachusetts		
Gulf	Provincetowi	\$4.29	https://www.gasbuddy.com/gasprices/massachusetts		
Shell Marina	Chilmark	\$4.85	https://www.gasbuddy.com/gasprices/massachusetts		

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These economic conditions set a backdrop of economic challenges that Cape and
Vineyard consumers are facing at this time and that support my recommendations
that follow.

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1		B. CONCERNS RELATED TO RATE DESIGN AND BILL IMPACTS
2 3	Q.	Please describe your concerns with Eversource's proposed rate design.
3 4	A.	The proposed rate design includes significant customer charge increases that shift
5		recovery of distribution costs from the energy charge to the fixed monthly customer
6		charge (Initial Filing, Exh. ES-RDC-1 at 40). In particular, increased customer
7		charges adversely affect low-use customers. Eversource has failed to demonstrate
8		how these fixed customer charge increases are reasonable and appropriate.
0	0	
9 10	Q.	Please describe Eversource's proposed customer charge for Rate R-1?
11	А.	Eversource proposes to increase the Rate R-1 Residential customer charge from the
12		current \$7 to \$10 per month, a \$3 per month or approximately 43% increase. Table
13		2. shows that, prior to the last rate case (D.P.U. 17-05), the Rate R-1 customer
14		charge for a Cape and Vineyard customer (in the Commonwealth Electric Company
15		service territory) was \$3.73, with a cost of service study showing the full cost of
16		service was \$10.38. (See D.P.U. 17-05-B Order at 268.) In its Order in D.P.U. 17-
17		05-B, the Department approved a \$7 customer charge which was \$1 lower than the
18		proposed \$8 and \$3.38 lower than the Full Cost of Service. In this case, Eversource
19		shows the full cost of service is \$11.57 (CLC-ES-1-1), or approximately 11.5%
20		higher than the Full Cost of Service from the prior case, as opposed to the 43%
21		increase that is proposed.

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Tab	le 2. Rate R-1	Customer					
	Description	Charge	Reference				
Prio	r to D.P.U. 17-05	\$3.73					
Full	Cost of Service	\$10.38	D.P.U. 17-05 Exh. ES-ACOS-2 at 3				
Pro	oosed 2018 Rates	\$8.00	D.P.U. 17-05 Sch. RDP-9 (East)				
DPL	Approved 17-05	\$7.00					
Proj	oosed 2023 Rates	\$10.00	D.P.U. 22-22				
	Cost of Service	\$11.57	Exh. ES-ACOS-2, at 9, line 14				
2 3 <b>Q</b> .							
3 Q.	What are the corresp	onding bill imp	act concerns you have?				
A.	My primary concern is	that Rate R-1 R	esidential low monthly use customers would				
5	see high percentage bill increases under the current proposal. For example, a 200						
Ď	kWh/month and 300 kWh/month customer could expect an 8.1% and 6.6% bill						
7	impact, respectively. (Exh. ES-RDC-3, Sch 2.)						
3 Q.	Q. Please explain why these customer charge increases are not reasona						
) A.	Eversource describes t	he shift of costs t	to higher use customers when the customer				
l	charge is set below the embedded cost. (CLC-ES-5-1.) However, when asked to						
2	provide complete documentation on mitigation considerations or methods to more						
		mentation on mi	tigation considerations or methods to more				
3	gradually implement ra		tigation considerations or methods to more ose customers more adversely affected by				
3		ate changes to the	ose customers more adversely affected by				
	the increase in the cust	ate changes to the omer charge, Ev					
ł	the increase in the cust charge impacts are mit	ate changes to the omer charge, Ev igated by balanc	ose customers more adversely affected by ersource simply responded that the custome				
ł 5	the increase in the cust charge impacts are mit usage. (CLC-ES-5-1.)	ate changes to the omer charge, Ev igated by balanc In my opinion,	ose customers more adversely affected by ersource simply responded that the custome ing the bill impacts across a wide range of				

1		lower the customer charge portion of their bill. Customers on fixed budgets, like
2		many on the Cape and Vineyard, suffer with higher customer charges.
3 4	Q.	Do you recommend a different approach to Eversource's proposed rate design?
5	A.	Yes. I propose that the current \$7.00 Residential Customer Charge applicable to
6		Rates R-1, R-2, R-3 and R-4 increase by \$1.00 on each January 1, 2023, 2024 and
7		2025 to reach the \$10 Customer Charge requested by Eversource. Table 3.
8		Residential Rate Customer Charge Alternative demonstrates how the customer
9		charge level would reach that proposed by Eversource, but over a period of 3-years.

Table 3.	Table 3. Residential Rate Customer Charge Alternative					
			Proposed			
F	Rate	Current	1/1/23	1/1/24	1/1/25	
R-1, R-	2, R-3, R-4	\$7.00	\$8.00	\$9.00	\$10.00	

10

11	I believe this adjustment is appropriate to more gradually implement changes to
12	residential ratepayer bills especially at this time of unprecedented inflation and
13	overall energy price volatility. If this alternative approach were adopted, the
14	deficiency in revenue would be recovered through the variable, usage based, cost
15	component of the Residential Rate Class.

### 16 III. PERFORMANCE-BASED RATEMAKING METRICS

### 17 Q. Please summarize Eversource's proposed PBR metrics? 18

19 A. Eversource is requesting renewal of the PBR plan approved by the Department in

20 D.P.U. 17-05 for up to a 10-year term (Initial Filing, Exh. ES-CAH/DPH-1 at 8)

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1		and has proposed continuation of existing and new additional PBR metrics (Initial
2		Filing, Exh. ES-PBR/PLAN-1, Exh. ES-METRICS-1, 2022 Climate Adaptation and
3		Mitigation Plan, Exh. ES-METRICS-2 and Customer Service Initiatives in 2020
4		Exh. ES-METRICS-3; Resp. to DPU Set-13 and DPU Set-23). As Eversource
5		described in response to DPU 13-1 (citing D.P.U. 17-05 at 412) (emphasis added),
6		"[I]n its final decision approving the Company's current PBR Plan, the Department
7		also identified three categories for PBR metrics: (1) customer satisfaction and
8		engagement; (2) reductions in system peak; and (3) strategic planning for climate
9		adaptation. The Company's existing metrics measure benefits to customers in each
10		of these three categories and the metrics proposed in this proceeding build on the
11		experience from the current PBR plan. This experience has allowed the Company
12		to modify its existing metrics to reflect what it has learned and in response to
13		evolving trends." Eversource has updated its Climate Adaptation and Mitigation
14		Plan, which continues to include LED or energy efficient lighting at Eversource
15		facilities. See Exh. ES-METRICS-2.
16 17 18	<b>Q.</b> A.	Have you previously reviewed Eversource's PBR metrics? Yes. I participated in Eversource's rate case in D.P.U. 17-05 and the PBR metrics

19 compliance phase in D.P.U. 18-50, where an order remains pending by the 20 Department.

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1	Q.	Do you have concerns with the PBR metrics?
2 3	А.	Yes. I have concerns related to the Department's pending order in D.P.U. 18-50 as
4		well as to Eversource's continued focus on LED or energy efficient lighting at
5		Eversource facilities under the Climate Adaptation Plan.
6	Q.	Please describe your concerns related to D.P.U. 18-50.
7	А.	I am concerned that the Department's order remains pending in D.P.U. 18-50.
8		Hopefully, intervenor concerns in that docket can be accounted for in Eversource's
9		PBR metrics soon.
10 11	Q.	Please describe your concerns related to LED or energy efficient lighting in the PBR metrics.
12 13	A.	I am concerned that Eversource's proposal continues to focus on LED or energy
14		efficient lighting at Eversource facilities under the Climate Adaptation Plan.
15		Eversource has not proposed – in response to evolving trends (see DPU 13-1 cited
16		above) – to eliminate the LED or energy efficient lighting at Eversource facilities
17		under the Climate Adaptation Plan. Eversource reported that over 50% of lighting
18		in its Massachusetts facilities had been upgraded to LED since 2017. (D.P.U. 21-
19		106, Exh. ES-RWF/ANB-2, App. A at 1.)
20 21	Q.	Why should this LED lighting at Eversource facilities PBR metric be
22 23	×.	eliminated?
23 24	A.	Despite the claim by Eversource that LED fixtures have not become industry
25		standard (CLC-ES-4-6), there is sufficient evidence to support that LED fixtures
26		have in fact become industry standard practice. A study performed for the

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1		Massachusetts Energy Efficiency Program Administrators (attached as Exhibit
2		CLC-KFG-4), as part of commercial and industrial lighting adjustment measure life
3		calculations, confirms the rapid adoption of LED technologies and a transforming
4		market that support LED lighting as baseline or standard practice.
5		
6	IV.	CONCLUSION
7 8	Q.	Could you please summarize your recommendations as to how the Department should resolve your concerns related to rate design and PBR metrics?
9	A.	I have the following recommendations:
10		(1) Related to rate design, I am concerned about the high percentage bill increases
11		that Residential low monthly use customers would see under the current proposal.
12		Eversource has not justified this rate design that includes dramatic increases to a
13		fixed portion of the bill, and they have proposed no mitigation for affected
14		customers. Customers have no opportunity to use less electricity to lower the
15		customer charge portion of their bill. Customers on fixed budgets, like many on the
16		Cape and Vineyard, suffer with higher customer charges. My recommendation to
17		phase-in the increase in the Residential Customer Charge over a three-year period is
18		a more sound, just and reasonable approach at this time.
19		(2) Related to the PBR metrics, I am concerned in regard to the LED lighting metric
20		at Eversource facilities, as part of the Climate Adaptation and Mitigation Plan PBR
21		metrics, that Eversource should not be rewarded for measures that have now
22		become industry standard. I recommend the elimination of the LED lighting metric
23		at Eversource facilities.

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### 1 Q. Does this conclude your testimony?

2 A. Yes it does.