# Innovation Pilots Framework: Straw Proposal

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### 1. Introduction

### 1.1 Procedural History

On October 2, 2019, the Connecticut Public Utilities Regulatory Authority (Authority or PURA) issued an Interim Decision<sup>1</sup> in Docket No. 17-12-03, <u>PURA Investigation into Distribution System Planning of the Electric Distribution Companies</u>. The Interim Decision outlined the Authority's framework for investigating methods for realizing an equitable modern electric grid in Connecticut, as well as for near-term and long-term plans to ensure continued developments to Connecticut's electric grid through a biennial integrated distribution system planning process. During this proceeding, the Authority established the following objectives for its Equitable Modern Grid (EMG) Framework:

- 1. Support (or remove barriers to) the growth of Connecticut's green economy;
- 2. Enable a cost-effective, economy-wide transition to a decarbonized future;
- 3. Enhance customers' access to a more resilient, reliable, and secure commodity; and
- 4. Advance the ongoing energy affordability dialogue in the State, particularly in underserved communities.

Based on the foundational record established during Phase I of Docket No. 17-12-03, the Authority identified eleven near-term topics to be investigated in three additional phases (Phase II, III, and IV) in order to realize the EMG Framework's objectives. One such topic identified for Phase II was Innovative Technology Applications and Programs<sup>2</sup> for which an implementation framework (or straw proposal) is detailed in this document. The Authority is conducting this uncontested proceeding pursuant to §§ 16-11, 16-243v, and 16-244i of the General Statutes of Connecticut (Conn. Gen. Stat.).

Indeed, this straw proposal reflects an approach for a future Innovation Pilots Framework to implement a safe, but monitored, place to test new ideas and validate their benefits in the real world. Innovative pilot programs, technologies, products, and services will be deployed on a limited basis, investigated, and evaluated for overall impact, costs, and benefits, and scaled if ratepayer benefits are demonstrated. This, in turn, reflects a natural next step of the Electric Efficiency Partners (EEP) Program, which was developed to reduce demand for electricity based on the use of demand-side technology. The framework outlined herein is being established in order to expand on the successes of the EEP program and provide a procedural mechanism to accelerate pilot deployment and innovation.

<sup>&</sup>lt;sup>1</sup> See, Docket No. 17-12-03, Interim Decision dated October 2, 2019, <a href="http://www.dpuc.state.ct.us/dockcurr.nsf/0/98b91b64d734d3368525848700598fe1/\$FILE/171203-100219%20InterimDecision.pdf">http://www.dpuc.state.ct.us/dockcurr.nsf/0/98b91b64d734d3368525848700598fe1/\$FILE/171203-100219%20InterimDecision.pdf</a>.

<sup>&</sup>lt;sup>2</sup> See, Docket No. 17-12-03RE05, <a href="http://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=17-12-03re05">http://www.dpuc.state.ct.us/dockcurr.nsf/(Web+Main+View/All+Dockets)?OpenView&StartKey=17-12-03re05</a>.

### 1.2 Purpose

This document lays out a straw proposal for an Innovation Pilots Framework, a mechanism to implement and scale the Innovation Pilots within the EMG Framework, identified by the Authority. It is the intent of the Innovation Pilots Framework to enable deployment of high-value project solutions that might not otherwise be possible or expedient within the current regulatory environment. The Innovation Pilots Framework outlines specific design principles and a programmatic approach that draws upon best practices from innovation platforms in other jurisdictions. The intent of this document is to provide a clearly articulated vision of Connecticut's Innovation Pilots Framework to solicit stakeholder feedback, shape program development, and inform successful implementation.

### 1.3 Guiding Principles

This straw proposal was developed with attention to several guiding principles:

- 1. Economic Viability and Equity: The Innovation Pilots Framework is an opportunity to realize and advance innovative solutions that have the potential to deliver value to all electric customers and the state as a whole. Consistent with the overarching goals of the EMG Framework, it is the Authority's intention that the Innovation Pilots Framework will support the growth of Connecticut's green economy. Furthermore, this Innovation Pilots Framework seeks to promote equity by delivering benefits to all customer classes and segments, developing green jobs to provide statewide economic benefit, and effectively using customer funds through the deployment of cost-effective projects. Only through equitable solutions can a sustainable green economy be established.
- 2. Transparency: Transparency is crucial for activities that are in service to the public interest and funded by customers. Clear communication is necessary to illustrate how public funds will be spent, and how outcomes of the Innovation Pilots Framework will be measured and evaluated. In this context, transparency includes (but is not limited to) pilot project economics, stakeholder visibility on the goals and objectives for proposed projects, and insight into screening, evaluation, and decision-making criteria.
- 3. Diversity & Market Gaps: The Innovation Pilots Framework intends to create unique opportunities for high-value, customer-facing solutions that may otherwise face barriers to market entry. To this end, the Innovation Pilots Framework will bridge gaps in existing programming and will focus on enabling a breadth and diversity of customer-facing solutions.

- 4. Scalability: The intent of the Innovation Pilots Framework is to identify and foster long-term solutions for the electricity network and end-users. The delivery of meaningful system and customer benefits can only be meaningfully achieved at scale, and thus any projects that would be considered in the Innovation Pilots Framework must, by necessity, demonstrate the potential to scale up past the initial demonstration phase to deliver benefits to a wider set of customers.
- **5. Continuous Learning:** To succeed, the Innovation Pilots Framework should embody an agile process that can grow and adapt to suit a wide array of customer, grid, and market needs. Continuous improvement mechanisms, informed by experiential learning, are a necessary and valuable element of this process, and will enable evolutionary growth towards a more advanced framework in furtherance of stated long-term strategic goals. Feedback and lessons learned from applicants, innovators, and internal stakeholders will prove critical to improving the Innovation Pilots Framework over time and promoting a regulatory environment that encourages further innovation.

### 1.4 Overview

This section provides a high-level overview of the main components of the Innovation Pilots Framework straw proposal: Programmatic Schedule, Participation Pathways, Oversight, Cost Recovery, and Anticipated Program Evolution.

### 1.4.1 Programmatic Schedule

As described in the Innovation Pilots Framework Strategic Vision Document,<sup>3</sup> the Authority intends to structure this program as a four-phase process: (1) Ideation & Screening; (2) Prioritization & Selection; (3) Project Deployment; and (4) Assessment & Scale.

The first phase, *Ideation & Screening*, will provide an opportunity for innovators of pilot projects to submit a concept proposal for consideration. In the second phase, *Prioritization & Selection*, a portion of innovators will be invited to develop more complete project proposals for consideration, and final project selections will be made. During the third phase, *Project Deployment*, innovators will have the opportunity to implement their proposed projects, with appropriate support, oversight, and data collection. In the last phase, *Assessment & Scale*, innovators will be asked to develop and share a final report that will help assess and determine those projects that should selected for "at-scale" deployment. The final reports will also build and enhance the Authority's continuous learning with respect to the Innovation Pilots Framework's program design.

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<sup>&</sup>lt;sup>3</sup> See, Docket No. 17-12-03RE05, Attachment 1, Notice dated December 22, 2020, <a href="http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/c029a38b9a7afd9685258464600734ac2?OpenDocument">http://www.dpuc.state.ct.us/dockcurr.nsf/8e6fc37a54110e3e852576190052b64d/c029a38b9a7afd968525864600734ac2?OpenDocument</a>.

### 1.4.2 Participation Pathways

The intent of the Innovation Pilots Framework is to create opportunities for and encourage participation from the full ecosystem of potential solutions providers and innovators. Due to the variety of potential innovators who may be interested in contributing to this innovation ecosystem, the straw proposal proposes to establish three separate participation pathways for project implementation. The first pathway will provide opportunities for third-party companies that offer distributed energy and smart grid solutions to develop high-quality demonstrations and other innovative projects. The second pathway will provide a structure for electric distribution companies (EDCs) to more nimbly address customer/system needs and prototype customer-facing offerings. It is expected that these offerings will focus on gaps in or opportunities to improve upon existing tariffs or programs – and could include "bring your own device" (BYOD) programs to help cost-effectively address system challenges. The third pathway will provide a collaborative space for third-party developers and EDCs to connect, partner, and bring new projects to market that require contributions and engagement from both developers and EDCs. Additional detail on these three pathways is provided in Section 3.

### 1.4.3 Oversight

The Innovation Pilots Framework will be led by the Authority with the support of a third-party administrator (Program Administrator) to oversee the process and an Innovation Advisory Council (IAC or Advisory Council) comprised of diverse stakeholders to offer input and recommendations. The Authority, with input from the IAC, will initially screen projects against several pass/fail criteria to determine eligibility. At each subsequent phase of the Innovation Pilots Framework, projects will be evaluated against key metrics that may evolve and iterate over time.

### 1.4.4 Cost Recovery

As critical partners and enablers of a successful Innovation Pilots Framework, both EDCs and third-party developers will require recovery of reasonable and prudent program costs. Cost recovery could occur through multiple mechanisms, including annual reconciliation processes or riders and general rate cases. Costs of developer-led projects may be recovered through mechanisms such as the Non-Bypassable Federally Mandated Congestion Charge (NBFMCC), as appropriate. Ideally, Innovation Pilots Framework cost recovery mechanisms should provide relative clarity for EDCs while incorporating common-sense safeguards for participating and non-participating customers alike. To that end, the Authority intends to examine additional ratepayer protections such as cost caps and risk sharing where appropriate.

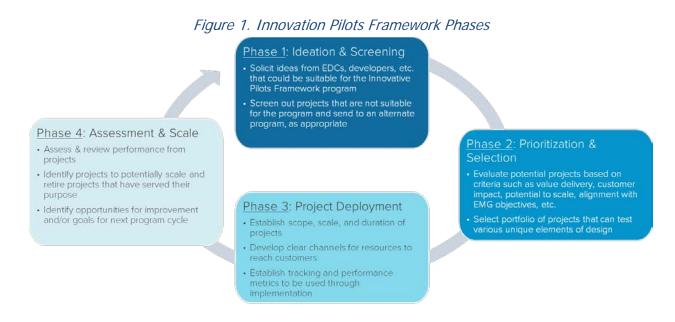
### 1.4.5 Anticipated Program Evolution

As the Innovation Pilots Framework matures and gains experience through project selection, launch, and execution, it may be appropriate to incorporate additional complexities and lessons learned into the process. Program modifications will be guided by shifting policy objectives, gaps and needs identified in other EMG dockets, as well as by innovators' first-hand experience. In the spirit of continuous improvement and a desire to build upon early successes, the structures and processes proposed in this Innovation Pilots Framework may evolve over time.

## 2. Programmatic Schedule

### 2.1 Overview of Programmatic Schedule

The Innovation Pilots Framework intends to codify an experiential learning and continuous improvement framework. The Authority intends to establish a four-phase pilot project development cycle, as illustrated in the diagram below. The four project development phases include: (1) Ideation & Screening; (2) Selection & Prioritization; (3) Project Deployment; and (4) Assessment & Scale. The process will operate on a two-year cycle, with a new cohort launched each year.<sup>4</sup>



### 2.2 Phase 1 – Ideation & Screening

The Innovation Pilots Framework project cycle will begin with Phase 1, *Ideation & Screening*, which consists of a pre-application outreach and education window to cultivate the ecosystem of innovation, an innovation solicitation, and an initial screen of applications. Phase 1 provides an opportunity for pilot project innovators to submit a concept proposal for consideration. This phase will kick off with the Authority's determination of objectives for the forthcoming Innovation Pilots Framework project cycle. The Authority or the Program Administrator will then reach out to EDCs and developers to promote the process, encourage applications, and answer questions that prospective applicants may have. A clear schedule will be designed for the application window and review process and clear screening and evaluation criteria as well as data collection needs will be established by the Authority and made available for innovators to consider in their application.

<sup>&</sup>lt;sup>4</sup> See, *infra* Figure 3 in this document for a visual representation of the two-year process cycle.

The outset of this process is designed to reduce barriers to entry for applicants, and thus an initial, simplified application will be used for the first screen. This approach will allow for the submission of a higher volume of initial applications with novel ideas that could benefit Connecticut and electric customers. The application will require innovators to include high-level information on the details of project implementation, potential to scale, alignment with EMG objectives, value delivery, and customer impact. In addition, projects will be expected to help identify overlap or intersection with other state-led clean energy, affordability, and resilience programs. Based on these high-level project overviews, applications will be screened to identify projects eligible to be considered in Phase 2, Prioritization & Selection, and projects that are not suitable for the Innovation Pilots Framework may be guided to an alternate state-level clean energy program, where applicable and appropriate.

Initially, Phase 1 will consist of a structured application window to reduce operational complexities, but future cycles of the program could include a rolling application process.

### 2.3 Phase 2 – Prioritization & Selection

In Phase 2, *Prioritization & Selection*, a subset of applicants will be invited to develop more complete and detailed project proposals for consideration. A clear review and selection schedule will be outlined – to include transparent evaluation metrics and criteria (in addition to a target number of projects to fund), which will inform, but not constrain, the decision-making process. Specific metrics, criteria, and parameters are further discussed in Section 4. Rules and boundaries will be established regarding any potential negotiations that might be allowed to establish final project descriptions, objectives, and potential rule derogations. In addition, applicants will be expected to provide formal verification of ineligibility to participate in other state programs for which they may be considered. A portfolio of projects will then be selected by the Authority for the subsequent project deployment phase.

After consideration of input provided by the IAC and the Program Administrator, Phase 2 will conclude with the publication of a decisional document that provides an overview of the review and selection process and announces the successful projects for deployment.

### 2.4 Phase 3 – Project Deployment

During Phase 3, *Project Deployment*, innovators will deploy their proposed projects based on an agreed scope and scale. Upon final project selection, the Authority plans to provide innovators with approximately 12 to 18 months to launch projects and collect data on project performance. The Authority reserves the right to terminate projects that do not adhere to programmatic guidelines or demonstrate an inability to meet program objectives and/or guidance provided by the IAC.

During the active lifetime of the project, innovators will be required to meet reporting requirements, with progress periodically reported to the Authority. Annual performance reviews will be conducted by the Program Administrator, with redacted reports made publicly available as a compliance filing in the Innovation Pilots Framework cycle docket. Specific metrics, criteria, and parameters are further discussed in Section 4.3, Eligibility Criteria & Evaluation Metrics.

The Authority or the Program Administrator will provide appropriate support and oversight, including via recurring review meetings with innovators to identify and discuss project progress, roadblocks, and rule derogations as needed.

### 2.4.1 Rule Derogations

It is the Authority's intent that the Innovation Pilots Framework enables deployment of project solutions that might otherwise not be possible or reasonably expedient and, in some select cases, may include derogations of specific rules or regulations that fall under the Authority's jurisdiction. This is expected to take the form of limited waivers to rules, program requirements, or other regulations established by the Authority. However, to the extent it would be required, any such derogations (e.g. waivers, modifications, exemptions, relaxations, etc.) would be confined solely to a project's participation in the Innovation Pilots Framework and should be identified upfront by a prospective participant during the application process. During the *Prioritization & Selection* Phase (Phase 2), an agreed-upon scale and scope will be discussed with project innovators to include the necessity of any potential rule derogations. Although rule derogations will not be limited by this initial discussion, it is expected that project innovators will have an upfront view of any derogations that they will require for successful project implementation.

The potential scope of these rule derogations is expected to be narrow and necessarily limited by the Authority's jurisdictional bounds. The Authority does not possess the legal authority to allow derogations of requirements established by the legislature or other local, state, or federal government agencies. In addition, rule derogations will not be granted where there is the potential to create unduly discriminatory new rules or regulations that prevent an appropriately competitive marketplace. Prospective derogations will only be implemented on an interim basis until the merits of such changes are sufficiently vetted, unless otherwise indicated.

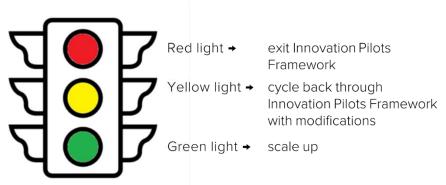
### 2.5 Phase 4 – Assessment & Scale

In Phase 4, Assessment & Scale, innovators will be required to develop and submit a final report discussing project performance and lessons learned. Conclusions on project performance are expected to inform decisions on project scaling, while lessons learned will be used to enable insights that benefit future projects as well as continuous learning about the Innovation Pilots Framework process itself. The IAC or Program Administrator will provide a brief report of recommendations based on the final reports submitted by innovators to assist the Authority in making informed decisions as to which projects should be identified for deployment at scale. This

phase will promote discussion of potential opportunities for improvement or modification in future cycles based on lessons learned by innovators and the Authority.

It is expected that most projects will have a clear "go" or "no go" decision regarding scaling at the end of Phase 4. These decisions will be filed as a reopener to the Innovation Pilots Framework cycle docket. Projects that are ready for scaling up will be invited to submit the appropriate regulatory application and, when applicable, will be directed towards relevant state programs or funding mechanisms. Projects that are not yet ready to scale but display promise and economic viability will have an opportunity to cycle back though the Innovation Pilots Framework process with modifications in place, but this will be assessed on a case-by-case basis. Projects that do not display further potential to scale up upon assessment during Phase 4 will exit the Innovation Pilots Framework.

Figure 2. Traffic Light Assessment at Phase 4



This approach follows a "fail fast" mindset, which seeks to identify and scale successful projects, while providing freedom and flexibility to retire projects that do not demonstrate sufficient potential to scale. Such an approach allows opportunity for a larger portfolio of projects than could be contemplated otherwise, and further represents an important tool to limit cost impacts by ensuring that program funds are directed to successful projects that are delivering commensurate value.

The figure below represents how the proposed Innovation Pilots Framework schedule could be phased for annual project launches. Potential acceleration of Phase 1, Ideation & Screening, and simple modifications to the Innovation Pilots Framework are possible during later cycles' dockets, based on lessons learned about the impact and efficiency of the process during earlier cycles.

2021 Cvcle 2021 Cvcle Ideation & Prioritization Assessment & Docket Close Kick-off Screening & Selection Scale Pre-Application 2022 Cycle 2022 Cycle Ideation & Prioritization Assessment & Outreach & Education Docket Close Kick-off Screening & Selection Scale Window Potential acceleration of Prioritization Ideation & 2023 Cycle later cycles during project & Selection Deployment Kick-off Screening ideation and selection Participation Pathways Overview of Participation Pathways

Figure 3. Potential Innovation Pilots Framework Programmatic Schedule

Year 2

Year 3

## 3.

Year 1

To create a sustainable innovation ecosystem that creates opportunities for a wide array of potential projects, the initial cycle of the Innovation Pilots Framework will establish three distinct participation pathways for potential project innovators: (1) developer-led projects; (2) EDC-led projects; and (3) collaborative projects. These three types of projects are shown below.

Pathway 1: Developer-Led Projects Pathway 2: EDC-Led Projects Pathway 3: Collaborative Projects Focus on innovative · Focus on deployment of Focus on innovative tariff mechanisms for structures hardware and/or software deployment of hardware paired with novel tariff E.g., critical peak pricing for and/or software solutions structures commercial & industrial • E.g., innovative solutions customers; bring your own • E.g., smart thermostat that help maximize grid and device (BYOD) programs demand response program end-use flexibility that may enhance demandthat pays out directly to side flexibility customer bills

Figure 4. Participation Pathways

### 3.1.1 Multiple Pathways to Encourage Broad Participation

The Authority's intention in articulating three distinct participation pathways into the Innovation Pilots Framework is to reflect the reality that a prospective pilot project will have different needs – including regulatory constraints and differing funding profiles – depending upon whether the project is developer-led, EDC-led, or a collaborative partnership between an EDC and a third-party developer.

The delineated participation pathways are intended to encourage participation from a wide array of potent contributors and to foster a collaborative ecosystem; distinct participation pathways are intended to provide dedicated avenues for ideas (Pathways 1-3) and market participants (Pathways 1 and 3) that have historically been excluded or discouraged by the traditional regulatory model. Purposefully encouraging diversity in the first program cycle will give the Authority an opportunity to assess the relative success of this process design for different types of projects and provide useful information and input for further modification and evolution of the program. In this case, "diversity" refers to not only the type of project (the mechanisms for delivering value to customers and the grid), but also refers to the types of entities submitting project proposals and leading implementation.

Even as the Innovation Pilots Framework seeks to create space within the regulatory framework for innovation, the program design also seeks to create conditions sufficient to help catalyze a more proactive and innovative approach on the part of EDCs and to encourage impactful collaboration with leading-edge third-party clean energy companies. Accordingly, the long-term vision of the Innovation Pilots Framework reflects a vibrant portfolio of EDC and third-party partnerships, with projects that deliver innovative and high-value customer solutions.

Notwithstanding this long-term vision, the Authority recognizes that, in the near-term, it is prudent to establish standalone EDC- and developer-led pathways so that this longer-term desire for productive collaboration does not impede a robust project offering set. To this end, it may be appropriate to establish a target number of projects or a target funding allocation for each participation pathway for an initial cycle and to evolve the use of such targets over time.

Distinct participation pathways should not be construed as conferring differing treatment for the various project types across many of the other program elements described in this Innovation Pilots Framework straw proposal, such as evaluation, selection, etc. It is intended that these three participation types will be treated as similarly as possible. For example, to maintain fairness across the project pathways, evaluation criteria must remain consistent. Differentiation in the early stages of the process is meant to ensure that third parties have the same understanding of the expectations and constraints inherent in the regulated process and therefore can be fairly held accountable to performance evaluation in later stages.

There will be a need, particularly in the initial program cycle, to provide education and resources to non-EDC participants so that they have sufficient knowledge of current regulation, processes, and funding mechanisms to construct effective proposals. This outreach will help to cultivate a more robust ecosystem of participants that will benefit the process by keeping innovation within the intended scope of the Authority. Informed by other jurisdictions' experience and best practices, the Authority suggests that lack of proactive outreach, support, and education for non-traditional parties can lead to disengagement and/or miscommunication of expectations between parties. It is the goal of the Authority to ensure that all parties, both EDCs and third parties, are excited, engaged, and empowered by this process.

### 3.2 Pathway 1: Developer-Led Projects

Developer-led projects are anticipated to focus on innovative approaches or mechanisms for the deployment of hardware or software. Pathway 1 projects could take a wide variety of forms but could include a demonstration or proof-of-concept for leading-edge clean energy technologies.

### 3.3 Pathway 2: EDC-Led Projects

EDC-led projects are expected to focus on innovative customer programs and/or tariff structures. An illustrative example of an EDC-led project in the Innovation Pilots Framework could be the prototyping of an advanced critical peak pricing tariff for commercial customers or the development of a "bring your own device" (BYOD) program to enhance demand-side flexibility.

By creating a separate, EDC-specific participation pathway, the Authority intends to mitigate potential points of conflict between third-party developers and the EDCs, as well as to focus EDCs on the importance of impactful collaboration to drive innovative results.

### 3.4 Pathway 3: Collaborative Projects

Collaborative projects within Pathway 3 could be thought of as combining the approaches outlined in Pathway 1 and Pathway 2, respectively. As noted above, a key goal of the Innovation Pilots Framework is to create sufficient conditions for impactful collaborative engagements between leading-edge energy companies and the EDCs.

By pairing innovative grid-edge technology with advanced rate designs or integrated demandside programs, the Innovation Pilots Framework can help incubate the next generation of customer-facing solutions at the heart of the EEP program, in order to meet the goals of the EMG Framework and stimulate economic development in the clean energy sector.

## 4. Program Oversight

### 4.1 Overview of Program Oversight

The Authority intends to develop appropriate levels of program oversight to ensure adequate guidance, transparency, and use of customer funds. As this is a program to foster innovation, such oversight must also be sufficiently calibrated to avoid burdensome or prohibitive administrative requirements. In the interests of establishing such a balance, the Innovation Pilots Framework intends to establish programmatic oversight with a focus on the following key areas: (i) project governance, which will focus on the mechanisms by which the Authority provides guidance and feedback to innovators; (ii) metrics and criteria, which will focus on providing appropriate mechanisms to track and measure progress; and (iii) transparency, which will focus on ensuring visibility on decision-making and use of customer funds.

**Governance:** The Authority anticipates that this oversight process will include engagement and support from a team of facilitation partners including a Program Administrator to oversee the smooth progression of the program; and an Innovation Advisory Council composed of a representative set of stakeholders, which would not have formal decision-making responsibilities but would provide recommendations to the Authority at each stage gate. These facilitation partners are expected to ensure that both the Authority and these key stakeholders have appropriate visibility into the Innovation Pilots Framework process, and that key stakeholders have an avenue to actively engage in the process at key stage gates.

**Metrics & Criteria:** Metrics and criteria are expected to inform project evaluation throughout the programmatic schedule described in Section 5. Metrics will be informed by the EMG Framework and will become more targeted as projects progress through the Innovation Pilots Framework process. For example, initial eligibility to enter the Innovation Pilots Framework will be based on demonstrating several baseline requirements established to protect customers and ensure that projects align with program objectives, while scaling decisions will be based on the project performance over the specific evaluation period.

**Transparency:** Stakeholder engagement and review opportunities are a key aspect of the Innovation Pilots Framework as this program is intended to provide an opportunity for high-value, customer-facing solutions to develop and scale. The proposed mechanisms to enable process transparency are more formal avenues – docketed filings and opportunities to comment within the docket – but there is also an opportunity for additional informal means such as workshops hosted by the Authority or informational webinars to reach a larger group of stakeholders.

These three mechanisms were developed with the intent of creating a cohesive process where each area of focus interacts synergistically with the other. For example, reports generated by the Program Administrator and/or Advisory Council tie in aspects of governance and transparency while also being generally informed by metrics and criteria, as the Authority, along with facilitation

partners, ensures that stakeholders are informed of key project milestones and aligned with the stated metrics of the program.

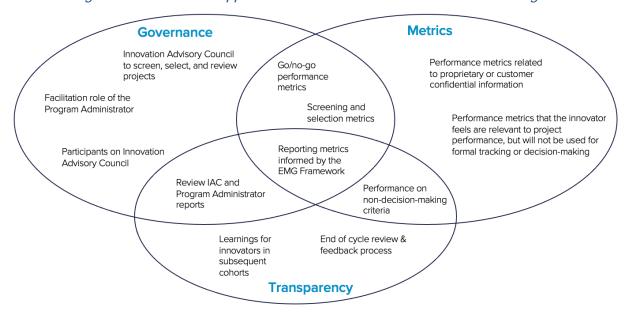


Figure 5. Harmonized Approach to Innovation Pilots Framework Oversight

### 4.2 Governance

While the Authority intends to develop, administer, and manage the Innovation Pilots Framework, the Authority aims to develop an ecosystem of innovation and ensure representation of diverse perspectives throughout the Innovation Pilots Framework process. Subsequently, the Authority anticipates engagement and support from facilitation partners, including a designated Program Administrator and an Innovation Advisory Council.

### 4.2.1 Innovation Advisory Council

It is envisioned that the Advisory Council would be led by the Authority and be comprised of a representative set of stakeholders, who would have a responsibility for ensuring a balanced perspective in the Innovation Pilots Framework processes. The Authority intends that the IAC would include representation from key supporting agencies including the Department of Energy and Environmental Resources (DEEP) and the Office of Consumer Counsel (OCC); customer, community, and low-income advocates; environmental advocates; trade organizations; and representatives from, among other potential entities, the Connecticut Green Bank, Connecticut Innovations, and each EDC. The IAC would be expected to offer input and recommendations during the selection process and would be engaged in the oversight process during project deployment and the final review of project outcomes offering feedback to the Authority as needed. While the IAC would not have formal decision-making responsibilities, they would provide input at each stage gate based on agreed-upon evaluation criteria.

### 4.2.2 Program Administration

The Program Administrator is expected to have the responsibility to support the Authority's efforts to oversee and administer the process, ensuring its smooth progression. The Program Administrator is expected to support outreach and engagement with the developer marketplace and with EDC teams, as necessary. The Program Administrator is also expected to facilitate the Authority's engagement and partnership with the IAC and serve as a non-voting member of the IAC.

Meetings of the IAC are not planned to be made public, but other stakeholders not involved on the IAC that are engaged and interested in the Innovation Pilots Framework will be encouraged to provide comment on the process through various formal and informal avenues established by the Authority as discussed in the Transparency & Accountability section of this document.

An overview of the responsibilities of the Authority, the IAC, the Program Administrator, and stakeholders is illustrated below.

Figure 6. Roles and Responsibilities in Innovation Pilots Framework Governance

	Expected Engagement	Roles & Responsibilities
PURA	Accountable: Signs off to approve tasks, objectives, and decisions	Ultimate decision-maker
Program Administrator	Responsible: Does the work	Administers the process and oversees pilot project implementation
Innovation Advisory Council (IAC)	Consulted: Gives input on tasks, objectives, and decisions	Offers input and perspective to the Authority throughout the process based on agreed-upon criteria
Innovators	Responsible: Do the work	Implement pilot projects and report on project metrics & criteria
Other Stakeholders	Informed: Get updates on progress and decisions	Engage with docketed proceedings via comments

### 4.3 Eligibility Criteria & Evaluation Metrics

Metrics and evaluation criteria are intended to be used throughout all four phases of the Innovation Pilots Framework to guide, screen, and select projects; understand project potential and delivered value; and enable data-driven decision-making. Pursuant to Conn. Gen. Stat. §§ 16-11 and 16-244i, the Authority intends to ensure safe, high-quality, and reliable electric service and provide equitable rates for electric consumers. These fundamental principles will be applied throughout the Innovation Pilots Framework.

Initial project eligibility will require the fulfillment of criteria established to protect customers and ensure that projects align with program objectives. Projects will be screened against this set of criteria and must meet them all to advance in the process. Proposed guardrails include elements to ensure that projects: (a) do not present an inappropriate competitive advantage to EDCs; (b) do not increase net costs to non-participant ratepayers; (c) are ineligible for other state programs; and (d) advance statewide decarbonization goals. Projects that meet these threshold requirements will be further evaluated against additional criteria.

In addition to initial eligibility criteria, at each phase of the procedural schedule, projects will be evaluated against a collection of key metrics. The following objectives of the Authority, established for the EMG Framework, informed the key metrics proposed for the Innovation Pilots Framework: (1) economic benefit; (2) cost-effectiveness; (3) solutions for programmatic and market gaps; and (4) equity. The overarching objectives for the Innovation Pilots Framework are outlined in the figure below.

Figure 7. Key Metrics from the Equitable Modern Grid Framework

### Objectives of the Equitable Modern Grid Framework

- Support (or remove barriers to) the growth of Connecticut's green economy;
- Enable a cost-effective, economy-wide transition to a decarbonized future;
- Enhance customers access to a more resilient, reliable, and secure commodity; and
- Advance the ongoing energy affordability dialogue in the State, particularly in underserved communities

### Proposed Categories of Key Metrics for the Innovation Pilots Framework

- Economic benefit: Does the proposed project provide local economic benefits?
- Cost-effectiveness: Is the proposed project costeffective, and will it be cost-effective at scale?
- 3. <u>Programmatic or market gaps:</u> Is the project leveraging unique mechanisms to provide solutions that would otherwise be unable to get to market?
- 4. Equity: Does the project promote equitable access to energy services and/or advance energy affordability in underserved communities?

The evaluation of projects against the Innovation Pilots Framework metrics will become progressively more stringent at each phase of project deployment. This approach intends to build in room for innovation and ideation while mitigating potential risks and costs to all parties. With a built-in "off-ramp" at each step of the process, only the most viable projects will make it to the final phase and be considered for at-scale deployment. The figure below illustrates how key metrics will be applied during each phase of the Innovation Pilots Framework.

Figure 8. Key Metrics Applied at Each Phase of the Programmatic Schedule

	Ideation & Screening	Prioritization & Selection	Project Deployment	Assessment & Scale
Economic Benefit	Will the proposed project provide economic value to Connecticut or its residents?	What are projected job or economic benefits for the state?	What are economic impacts? How many jobs were created?	What would at-scale benefits be? Would greater value be achieved at scale?
Cost- Effectiveness	Does the project proposal provide cost-effectiveness estimates? Can this project potentially deliver significant value?	Which projects have the greatest cost-effectiveness? What are the trade-offs? What is the potential net benefit of this project?	What are costs? What are customer bill savings or other value criteria?	Can these types of projects deliver durable value to all ratepayers? Would greater value be achieved at scale?
Programmatic or Market Gaps	Does this project address gaps in existing customer service offerings or grid services?	Does this help to advance the level, variety, or quality of service that customers can expect?	What is customer uptake? What is customer satisfaction?	Would an at-scale offering create increased competition and choice for customers?
Equity	Does the project consider impacts to and participation by underserved communities?	Does the project create or improve channels for participation for underserved communities?	What's the value to participating vs. non- participating customer? What are economic impacts to underserved communities?	What cross-subsidization challenges would this program create at scale?

Further details regarding key metrics will be formally established by the Authority in the final Decision in Docket No. 17-12-03RE05 and will be further refined with the input of the Program Administrator and the IAC at the initial launch of the Innovation Pilots Framework, but the following discussion of how these metrics may be measured to assess projects provides an initial sense of the expected criteria to be met for each phase of project deployment.

Local economic benefit can be measured via demonstration of incremental job creation, contracting within Connecticut over the pilot project life, documentation of analysis and/or business plans that demonstrate persistent direct and/or indirect job creation over the offering life at scale.

Cost-effectiveness balances participant costs and benefits with non-participant costs and benefits and electric system costs and benefits. Cost-effectiveness can be initially measured using a benefit-cost ratio. If a project has a benefit-cost ratio over its effective life from the Total Resource Cost test perspective greater than one (1), then the project is expected to deliver positive net present value (NPV). Reporting on cost-effectiveness for at-scale offerings can also be gathered from the Program Administrator Cost Test, Rate Impact Measure Test, and Participant Cost Test. A multitude of tests exist to measure cost-effectiveness from various perspectives, but all of these tests use the same mathematical basis – comparing the NPV of the benefits to the NPV of the cost.

Solutions to programmatic or market gaps will be evaluated against an establishment of baseline participation for similar programs and offerings as well as demonstration that the given offering is forecasted or has been shown to exceed this baseline, including documentation of market effects likely to occur from scaled deployment of the customer solution.

Equity impacts encourage increased inclusivity overall, as well as program participation by underserved communities. Underserved communities may include low-to-moderate income customers, customers in environmental justice communities defined pursuant to Conn. Gen. Stat. § 22a-20a, 5 and/or customers in distressed municipalities as defined by the Connecticut Department of Economic and Community Development. 6 Evaluation and measurement will require an establishment of baseline participation in underserved communities and subsequent demonstration that a given offering is forecasted or has been shown to exceed this baseline. Demonstrated net benefit to underserved communities can also be demonstrated through cost-effectiveness analysis, segmenting these populations via a modified Ratepayer Impact Measure (RIM) test. Further, process evaluation metrics are expected to either not significantly differ from or exceed performance for underserved communities relative to the general population.

### 4.4 Transparency & Accountability

The Authority intends to establish mechanisms throughout the Innovation Pilots Framework that appropriately balance transparency with expediency and provide confidentiality for innovators, as well as stakeholder engagement and review opportunities. Formal mechanisms for transparency will include a public launch of the innovation solicitation and a docketed proceeding tracking project selection, project performance, and project recommendations. A single docket will be opened for each cycle of the Innovation Pilots Framework and contain all formal updates filed on a regular basis (e.g., bi-monthly updates demonstrating project progress and key metrics). The establishment of an organized process that consists of regular filings and a single, central location for all project information will allow for stakeholder engagement and progress tracking.

The proposed mechanisms to enable process transparency are more formal avenues, but there is also an opportunity for additional informal means, such as stakeholder workshops hosted by the Authority or informational webinars. The inclusion of these additional steps would be contingent on stakeholder necessity and interest. The IAC is also intended to serve as a venue to foster stakeholder engagement and collaboration, as discussed above.

<sup>&</sup>lt;sup>5</sup> An environmental justice community is located within a municipality on the Connecticut Department of Economic and Community Development list of distressed municipalities or in a defined census specified under Conn. Gen. Stat. § 22a-20. See, <a href="https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities">https://portal.ct.gov/DEEP/Environmental-Justice/Environmental-Justice-Communities</a>.

<sup>&</sup>lt;sup>6</sup> Updated annually, the Distressed Municipalities' lists identify the state's most fiscally and economically distressed municipalities, based on tax base, personal income of residents, and the residents' need for public services. See, <a href="https://portal.ct.gov/DECD/Content/About\_DECD/Research-andPublications/02\_Review\_Publications/Distressed-Municipalities">https://portal.ct.gov/DECD/Content/About\_DECD/Research-andPublications/O2\_Review\_Publications/Distressed-Municipalities</a>.

An illustrative process is outlined below, which highlights several opportunities for formal stakeholder engagement within the proceeding.

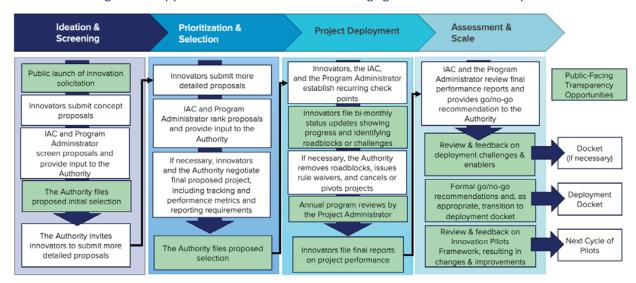


Figure 9. Opportunities for Stakeholder Engagement and Public Input

## 5. Cost Recovery

Connecticut will benefit from an Innovation Pilots Framework that is grounded in a sound regulatory structure, incorporating common-sense consumer protections. The use of existing funding and/or cost recovery mechanisms will enable the nimble deployment of new pilot projects and ensure that the Innovation Pilots Framework is sufficiently self-sustaining. Some options for how these cost recovery mechanisms may be applied for the Innovation Pilots Framework are outlined below.

Due to the inclusive approach established for this Innovation Pilots Framework, it is expected that the cost recovery mechanisms established for participating projects may need differentiation and flexibility. In all cases, it is the Authority's intent to ensure appropriate ratepayer protections given the pioneering nature of the Innovation Pilots Framework, and to ensure that any ratepayer costs are accompanied by commensurate expected benefits.

The Authority expects costs associated with the Innovation Pilots Framework to largely fall into one of two categories:

- Category 1: Annualized programmatic and administrative expenses
- Category 2: Uneven, less predictable expenditures related to specific project deployment

Category 1 costs, including programmatic and administrative costs, are proposed to be recovered via the Non-Bypassable Federally-Mandated Congestion Charge (NBFMCC) within the Revenue Adjustment Mechanism (RAM).

Category 2 costs, including expenditures specific to the deployment of selected projects within the Innovation Pilots Framework, are proposed to be recovered in base rates and addressed within the context of a general rate case. For those project-specific costs incurred between rate cases, EDCs are expected to be able to carry such costs into a regulatory asset, to be reconciled within the next rate case.

Consistent with approaches in other jurisdictions, the Authority is inclined to adopt a limit of \$5 million for any single pilot initiative. An overall Innovation Pilots Framework annual budget cap may also be an appropriate consumer protection measure and would allow the program to start smaller, building and scaling on success – incorporating experiential lessons learned.

For example, the diagram below serves as an illustrative example for how project costs might be recovered through rate cases or other means.

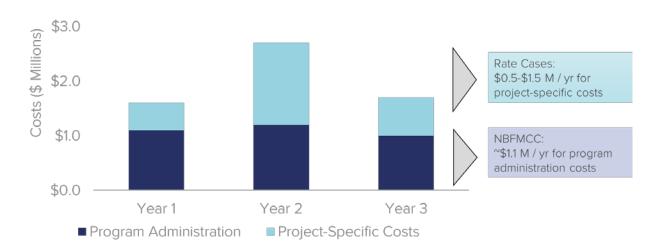


Figure 10. Example of Potential EDC Cost Recovery

It should be noted that Innovation Pilots Framework benefits are expected to accrue elsewhere, either directly to pilot participating customers or indirectly to the system and non-participating customers writ large. Thus, a process for comprehensively evaluating project costs and benefits is expected to be necessary. These benefits will be evaluated through the program oversight process and will be evaluated in conjunction with associated project costs.

## 6. Anticipated Program Evolution

As the Innovation Pilots Framework matures in selecting, launching, and executing projects, it may be appropriate to incorporate changes to the process that may not be beneficial during the first cycle. Examples of programmatic evolution include rolling application deadlines, additional stakeholder workshops, reduced timeline of the ideation and selection phases, and the collapse of all proposed projects into collaborative projects (the third participation pathway). Program modifications will be guided by shifting policy objectives, gaps and needs identified in other EMG dockets, and the final reports by innovators, which will include lessons learned from the specific projects, as well as lessons learned to inform the Innovation Pilots Framework's design at large. As outlined in Section 2, above, these lessons will be extracted through Phase 4 of the programmatic schedule – where both project and programmatic experiences are expected to spur continuous improvement within the Innovation Pilots Framework.

## 7. Next Steps

The Authority is interested in opportunities to solicit feedback and input from stakeholders on the proposed structure outlined in this document. Specifically, the Authority intends to host a workshop on April 8 to provide an overview of this Straw Proposal, solicit input, and answer any specific questions from stakeholders. Following the workshop, the Authority will also be accepting written comments on this Straw Proposal, which are expected to be due April 23. While the Authority welcomes stakeholder feedback on any items related to the successful implementation and launch of this program, the Authority offers more specific areas of interest for further input through the questions outlined below. Some of these questions are intended to solicit feedback specifically from potential project innovators to ensure that the proposed approach is accessible and strikes an appropriate balance that will allow for implementer participation. Notwithstanding the focus, the Authority is interested in and will consider input from non-implementer stakeholders on these areas as well.

### **Questions for All Stakeholders:**

1. Do stakeholders believe that the proposed approach for the Innovation Pilots Framework provides a suitable mechanism to source and launch new and innovative customer solutions consistent with the strategic objectives laid out in the Innovation Pilots Framework Strategic Vision? If not, where do stakeholders believe that there are opportunities to improve upon the approach that has been laid out here? Why do stakeholders believe that the proposed improvements will better support the objectives of the Innovation Pilots Framework?

- 2. Are there any specific metrics that stakeholders believe that the Authority should include in project selection and evaluation? Why should the Authority consider these metrics and what value do stakeholders believe that these metrics would add? Are there any metrics currently under consideration that stakeholders believe would not be useful or informative?
- 3. Are there any portions of the proposed process where stakeholders have greatest interest in participation or engagement opportunities? Why? How do stakeholders believe that inclusion in this portion of the proposed process would materially increase transparency and beneficial outcomes?
- 4. Do parties believe that the proposed structure provides an appropriate balance between customer protections and project innovator cost certainty? Are there any other mechanisms that the Authority should consider including that might help manage that balance? How would the proposed mechanisms improve either or both customer protections and reasonable project innovator cost recovery? Are there any trade-offs or compromises that might accompany these mechanisms?

### **Questions for Potential Project Innovators (Third Parties & EDCs):**

- 1. What kind of information do innovators believe could be reasonably included in the concept proposal phase to help the Authority and other decision-makers understand the high-level scope and intention of a proposed project? Are there any pieces of information that might be unreasonably burdensome to include? Why?
- 2. What level of additional detail could reasonably be provided as part of the second, more detailed round of project review? Are there cases where differing levels of rigor should be requested or allowed for proposals? Why?
- 3. What are key considerations that the Authority should include when balancing project progress tracking while minimizing burdensome obligations? Are there any tracking and reporting requirements that would be especially burdensome, and why? Are there any elements of project tracking and reporting that could be more easily offered to support project oversight?
- 4. Do innovators believe that there are any instances where projects or participation pathways should have unique performance or tracking metrics, and why?
- 5. Does the proposed window of approximately 12 months for pilot deployment provide sufficient opportunity for innovators to launch and collect project performance data? If not, how much time would innovators need for deployment, and what customer cost protections could be added to appropriately balance the potential for increased costs and inefficiencies?

6.	Are there any specific elements of pre-application outreach and education that should particularly be considered to support innovators? Why, and what value-add would come from those outreach approaches?