Advancing the Clean Energy Future

Acadia Center

21 Oak Street, Suite 202
Hartford, CT 06106
860.246.7121
acadiacenter.org

August 12, 2022

Mr. Jeffrey R. Gaudiosi, Esq.
Executive Secretary
Public Utilities Regulatory Authority
10 Franklin Square
New Britain, CT 06051

Acadia Center Comments Regarding Docket No. 21-05-15 – PURA Investigation Into a Performance-Based Regulation Framework for the Electric Distribution Companies

Dear Mr. Gaudiosi:

Acadia Center appreciates the opportunity to submit written comments in Docket No. 21-05-15 – PURA Investigation Into a Performance-Based Regulation Framework for the Electric Distribution Companies. The comments below address the following outcomes as outlined in Staff Concept Paper #2: 1) Grid Planning Effectiveness and Procurement Transparency; 2) Energy Efficiency and Conservation; 3) GHG Reduction; 4) Electrification of Transportation and Decarbonization Of Buildings; and 5) Social Equity.

Respectfully Submitted,

Oliver Tully
Director, Utility Innovation and Reform
Acadia Center
otully@acadiacenter.org

Amy Boyd
Director of Policy
Acadia Center
aboyd@acadiacenter.org

Outcome 1: Grid Planning Effectiveness and Planning Transparency

Do the existing regulatory mechanisms and program sufficiently support the outcome?				
Key				
+	**Yes**	The mechanism or program **incents achievement** of this outcome.		
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.		
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.		
Existing Regulatory Mechanisms and Programs	**Description**	**Mechanism or Program's Effect on Outcome**		**Issues for Attention**
		Score (+/0/-)	**Discussion**	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and revenue collection from customers.	0 or -	Cost-of-Service Regulation (COSR) does not support effective and transparent grid planning because of misaligned incentives that result in EDCs' capital expenditure (CapEx) bias. Truly "effective" grid planning would result in investments that work for consumers and the environment, rather than primarily EDC shareholders. High rates of return on capital expenditures mean that those incentives play an outsized role in determining which investments are pursued. MYRP and COSR do not necessarily incentivize better decisions for customers, which would lead to more distributed energy resources, increased investments in grid flexibility, among other consumer-orientated solutions. Instead, EDCs invest in	

			expensive capital infrastructure projects. At the same time, MYRP should theoretically enable better long-term planning because they help to avoid the need to devoting time and resources to annual rate cases. In general, multi-year rate plans do not enable sufficient stakeholder engagement in the grid planning process. Multi-year rate plans do not remove EDCs' CapEx bias, which disincentivizes EDCs from fully incorporating non-wires alternatives and distributed energy resources into their long-term grid plans. Revenue adjustment mechanisms do not remove traditional capital-intensive incentives. Regulatory requirements incentivize conservative planning assumptions to be conservative, designed to err on the side of overestimating demand and undervaluing distributed resources by significant margins.	
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with	0		

	annual adjustments allowed.			
Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than the return on equity approved in the most recent rate case.	0 or -	Although customers receive some revenues as a result of utility overearnings, because utilities retain 50% of the overearnings, utility shareholders continue to face an incentive to pursue investments that have the highest returns, rather than investments that may be most beneficial for customers but not the most lucrative for shareholders. Earnings Sharing Mechanisms do provide some benefits for customers, but do not fix fundamental problems related to Cost-of-Service Regulation and the incentives it creates.	
Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a monthly customer charge.	0		
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all transmission costs	0		

	assessed by the EDCs.			
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design.	0		
Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.	0		
Performance Incentive Mechanisms[1]	***Strategic Energy Management (SEM) Metric*:** The SEM metric is a long-term approach to advance energy efficiency that centers on setting goals for business	0		

[1] The inclusion of Performance Incentive Mechanisms related to the Conservation and Load Management (C&LM) Plan is intended ***solely*** to ensure that any future regulatory mechanisms, metrics, or incentives developed through Docket No. 21-05-15 are not duplicative of the mechanisms already established by the Department of Energy and Environmental Protection in the C&LM Plan.

	engagement and energy savings.			
	***Small Business Energy Advantage (SBEA)*:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified through the EDC's market segmentation analysis.	0		
	***Energy Conscious Blueprint (ECB)*:** The ECB encourages implementation of energy efficiency during construction, major renovations, and in the new equipment marketplace by providing incentives for the non-residential building sector.	0		
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes	+	Supports adoption of DERs.	

	customers to curtail energy use during periods of peak demand by enrolling eligible technologies.			
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.	0		
Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at 28% in 2022, increasing annually to 44% in 2030.	+	The RPS has a positive impact on effective grid planning, even in a restructured state, but must be well coordinated with other programs, including the Equitable Modern Grid, storage, EVs, and energy efficiency programs.	
Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and	+	If effectively implemented, the EMG framework and all of its resulting programs should have a positive impact on effective grid planning, increased transparency, and the incorporation of NWAs, DER, EVs, and other consumer-oriented solutions into EDC grid plans.	

	long-term plans to ensure continued developments for Connecticut's electric grid.			
Equitable Modern Grid Programs	***Energy Storage Solutions Program*:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system.	+	See EMG note above.	
	***Electric Vehicle Charging Program*:** The EV Charging program is designed, through a series of incentives, to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.	+	See EMG note above.	
	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a	+	See EMG note above.	

	procedural mechanism to accelerate the deployment and scalability of innovative pilots.			
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and economical interconnections.	+	Supports grid planning effectiveness.	
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential	+	Supports grid planning effectiveness.	

	Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.			

Overall, does the existing regulatory framework support achievement of this outcome?			Discussion
+	**YES** Incents Achievement	-	The current process of electric planning leads to overspending on large-scale, capital-intensive infrastructure solutions. Planning for the electric distribution grid involves a patchwork of investor-owned distribution utilities and municipal utilities undertaking individualized, proprietary modeling exercises. Despite intricate relationships between the gas and electric systems, the electric grid, gas pipelines, distributed energy resources (DER), and delivered fuels are not evaluated as an integrated energy system—even within large utilities that provide both gas and electric service and PUCs that regulate both industries. COSR incentives favor utility ownership of grid assets and reduce an EDC's incentive to choose a business relationship where they cannot earn capital returns on the asset, whether it's a wire or an NWA. COSR incentives favor avoiding third-party NWAs between rate cases. Because of the nature of shared savings, EDCs have an incentive to continue to invest in capital resources, even between rate cases, while keeping operational spending as low as possible—again favoring ownership over leases of NWAs. COSR incentives also favor longer-term depreciation investments, even for short-term problems. Because EDCs earn a return on equity on the undepreciated amount of a capital investment, they have a strong incentive to choose longer-lived investments with longer-termed depreciation periods. This incentivizes choosing a substation or wire over an NWA, for example.
0	**NO IMPACT**		
-	**NO** Disincentivizes Achievement		

Outcome 2: Energy Efficiency and Conservation

Do the existing regulatory mechanisms and program sufficiently support the outcome?				
Key				
+	**Yes**	The mechanism or program **incents achievement** of this outcome.		
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.		
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.		
Existing Regulatory Mechanisms and Programs	**Description**	**Mechanism or Program's Effect on Outcome**		**Issues for Attention**
		Score (+/0/-)	**Discussion**	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and revenue collection from customers.	0		
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with annual adjustments allowed.	+	Revenue decoupling has a positive impact on energy efficiency and conservation. The goal of electrification in terms of its decarbonization benefits is *efficient* strategic electrification—not increased load for the sake of more load. Even with large-scale electrification efforts, some degree of decoupling (or at minimum a	Another key issue to consider for reform is cost-effectiveness testing. Benefit-cost methodologies must incorporate new values for climate and retrofits. Today, cost-effectiveness testing prioritizes energy efficiency investments that deliver nearer-term savings, limiting treatment of older buildings that are more expensive to retrofit. Current benefit-cost test methodologies must evolve in order to address deep building retrofits and to fully account for

			mechanism to reward utilities for efficient electrification) must be maintained.	benefits including thermal comfort, health, safety, and emissions, in addition to bill savings. By doing so, efficiency programs can better address buildings in communities that have been underserved to date. In addition, benefit-cost tests should include avoided carbon emissions as an efficiency metric, rather than energy savings along, in order to better align energy efficiency with climate change mitigation. In Connecticut, the primary cost-effectiveness test is the Utility Cost Test (UCT). This test does not account for environmental benefits, nor does it account for oil or propane savings, in addition to a number of other significant omissions. The C&LM Plan has the potential to deliver significant greenhouse gas reductions in accordance with Connecticut's climate commitments, but by continuing to use the UCT as the programs' determinative test, Connecticut's PAs, DEEP, and PURA are making it harder to achieve this alignment. Because energy efficiency is one of the least expensive ways to reduce emissions, failing to account for emissions in the test may also increase the cost of complying with the state's own climate goals. Acadia Center recommends that state agencies and efficiency PAs instead adopt the Total Resource Cost Test (TRC)—already in use as a secondary test in Connecticut—as the programs' primary cost-effectiveness test, and account for the social cost of carbon in the test.
Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than	+	ESM should have a positive impact on energy efficiency and conservation by providing incentives for EDCs to lower costs (ideally through energy efficiency).	

	the return on equity approved in the most recent rate case.		In practice, the impact of ESM on energy efficiency and conservation depends on the actions that EDCs take to lower expenses between rate cases.	
Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a monthly customer charge.	+ or -	CAM plays an important role in supporting energy efficiency and conservation. The methods for funding energy efficiency face an inherent tension between overarching policies that direct EDCs to pursue "all cost-effective" energy efficiency, and the fact that budgets to do so are capped, meaning that Connecticut does not actually achieve "all cost-effective" energy efficiency. Imposing a budget cap artificially limits the amount of energy efficiency that can be achieved and restricts Connecticut only to the lowest hanging fruit, rather than allowing bundled programs that achieve deeper savings at a higher net cost-effectiveness. Energy efficiency programs are evolving, in Connecticut and across the Northeast. For years, lighting measures have played an outsized role in programs. Because lighting is a low-cost, easy-to-deliver efficiency measure with historically high savings potential, it has undergirded a substantial amount of program activity, particularly in the Residential Retail Products, Home Energy Solutions (HES), and	The lack of a direct link between the state's emission reduction goals and the energy savings goals outlined in the C&LM Plan hinders Connecticut's ability to achieve its GHG goals.

			Home Energy Solutions – Income Eligible (HES-IE) initiatives. However, because federal regulations have effectively banned the sale of most incandescent light bulbs, and because the programs have already replaced a high percentage of bulbs with CFLs and LEDs, the available savings from lighting measures have declined. Connecticut now has an opportunity to refocus on achieving deeper savings—a strategy that is critical to achieving Connecticut's climate commitments and results in substantial energy bill savings for program participants.	
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all transmission costs assessed by the EDCs.	0		
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design.	0		

Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.	+	Supports energy efficiency and conservation.	
Performance Incentive Mechanisms[2]	***Strategic Energy Management (SEM) Metric*:** The SEM metric is a long-term approach to advance energy efficiency that centers on setting goals for business engagement and energy savings.	+	Supports energy efficiency and conservation.	
	***Small Business Energy Advantage (SBEA)*:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified	+	Supports energy efficiency and conservation.	

[2] The inclusion of Performance Incentive Mechanisms related to the Conservation and Load Management (C&LM) Plan is intended ***solely*** to ensure that any future regulatory mechanisms, metrics, or incentives developed through Docket No. 21-05-15 are not duplicative of the mechanisms already established by the Department of Energy and Environmental Protection in the C&LM Plan.

	through the EDC's market segmentation analysis.			
	***Energy Conscious Blueprint (ECB)*:** The ECB encourages implementation of energy efficiency during construction, major renovations, and in the new equipment marketplace by providing incentives for the non-residential building sector.	+	Supports energy efficiency and conservation.	
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes customers to curtail energy use during periods of peak demand by enrolling eligible technologies.	+	Supports energy efficiency and conservation.	
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.	+	Supports energy efficiency and conservation.	

Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at 28% in 2022, increasing annually to 44% in 2030.	0		
Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and long-term plans to ensure continued developments for Connecticut's electric grid.	+	The EMG framework should work well in coordination with energy efficiency and demand response programs.	
Equitable Modern Grid Programs	***Energy Storage Solutions Program*:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage	0		

	and to foster a more reliable and resilient electric distribution system.			
	***Electric Vehicle Charging Program*:** The EV Charging program is designed, through a series of incentives, to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.	0		
	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a procedural mechanism to accelerate the deployment and scalability of innovative pilots.	0		
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group	0		

	(DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and economical interconnections.			
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.	0		

Overall, does the existing regulatory framework support achievement of this outcome?		**Discussion**
YES **+** Incents Achievement	+ or -	While there are many ways that the regulatory framework supports energy efficiency and conservation, there is much more that a PBR framework could do to achieve even more benefits through efficiency programs, especially in terms of cost savings for customers, improvements to housing quality, supporting electrification, and lowering emissions.

0	**NO IMPACT**		
-	**NO** Disincentivizes Achievement		

Outcome 3: GHG Reduction

Do the existing regulatory mechanisms and program sufficiently support the outcome?				
Key				
+	**Yes**	The mechanism or program **incents achievement** of this outcome.		
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.		
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.		
Existing Regulatory Mechanisms and Programs	**Description**	**Mechanism or Program's Effect on Outcome**		**Issues for Attention**
		Score (+/0/-)	**Discussion**	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and	0	Multi-Year Rate Plans do not have an impact on GHGs. They are designed to reduce administrative burdens and motivate cost savings, rather than to lower GHGs explicitly.	

	revenue collection from customers.			
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with annual adjustments allowed.	+	Revenue decoupling is a critical policy that removes the disincentive against energy efficiency, which is a key GHG reduction strategy.	
Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than the return on equity approved in the most recent rate case.	0	No impact on lowering GHG.	
Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a monthly customer charge.	+	CAM supports GHG reductions by funding the C&LM Plan.	
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all	0		

	transmission costs assessed by the EDCs.			
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design .	+	The NBFMCC has a positive impact on GHG reduction because it funds clean energy and nuclear power PPAs, the REC program, and other renewables programs.	
Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	
Performance Incentive Mechanisms[3]	***Strategic Energy Management (SEM) Metric*****:** The SEM metric is a long-term approach to advance energy efficiency that centers on setting goals for business	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	

[3] The inclusion of Performance Incentive Mechanisms related to the Conservation and Load Management (C&LM) Plan is intended ***solely*** to ensure that any future regulatory mechanisms, metrics, or incentives developed through Docket No. 21-05-15 are not duplicative of the mechanisms already established by the Department of Energy and Environmental Protection in the C&LM Plan.

	engagement and energy savings.			
	***Small Business Energy Advantage (SBEA)*:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified through the EDC's market segmentation analysis.	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	
	***Energy Conscious Blueprint (ECB)*:** The ECB encourages implementation of energy efficiency during construction, major renovations, and in the new equipment marketplace by providing incentives for the non-residential building sector.	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	

	customers to curtail energy use during periods of peak demand by enrolling eligible technologies.			
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.	+	By funding energy efficiency and conservation, there is a positive impact on GHG reduction.	
Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at 28% in 2022, increasing annually to 44% in 2030.	+	The RPS has a clear positive impact for GHG reduction.	
Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and	+	If the EMG framework and its associated programs are successfully implemented, they should have a positive impact on GHG reductions.	The NWA program should have a positive impact on GHG reduction once it is underway.

	long-term plans to ensure continued developments for Connecticut's electric grid.			
Equitable Modern Grid Programs	***Energy Storage Solutions Program*:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system.	+	The Energy Storage Solutions Program will have a positive impact on GHG reductions, assuming it is well administered, especially in terms of time-varying rates that incentivize charging at hours of the day when emissions rates are lowest.	
	***Electric Vehicle Charging Program*:** The EV Charging program is designed, through a series of incentives, to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.	+	The EV Charging Program will have a positive impact on GHG reductions, assuming it is well administered, especially in terms of time-varying rates that incentivize charging at hours of the day when emissions rates are lowest.	
	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a	+	The IES should have a positive impact on GHG reductions, assuming it successfully enables faster scaling of pilots that help to reduce emissions.	

	procedural mechanism to accelerate the deployment and scalability of innovative pilots.			
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and economical interconnections.	+	Supports GHG reductions.	
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential	+	Supports GHG reductions.	

	Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.			

Overall, does the existing regulatory framework support achievement of this outcome?			Discussion
+	**YES** Incents Achievement	+	While existing policies may support GHG reductions to some degree, there is much more that new and expanded programs and policies can do to accelerate GHG reductions.
0	**NO IMPACT**		
-	**NO** Disincentivizes Achievement		

Outcome 4: Electrification of Transportation and Decarbonization of Buildings

Do the existing regulatory mechanisms and program sufficiently support the outcome?		
Key		
+	**Yes**	The mechanism or program **incents achievement** of this outcome.
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.

Existing Regulatory Mechanisms and Programs	Description	Mechanism or Program's Effect on Outcome		Issues for Attention
		Score (+/0/-)	Discussion	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and revenue collection from customers.	+ or -	By enabling planning over a multi-year horizon, MRPs should in theory allow EDCs to plan for transportation electrification and building decarbonization. However, because COSR incentivizes EDCs to build and own infrastructure themselves, MRP may still lead to decisions that slow progress towards transportation and building decarbonization.	
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with annual adjustments allowed.	+ or -	Revenue decoupling removes disincentives against energy efficiency, which helps to decarbonize buildings. However, by making EDCs neutral towards increased load, revenue decoupling may work against what is needed to motivate EDCs to pursue increased electric load from transportation and/or building electrification. Nevertheless, energy efficiency (and therefore some degree of revenue decoupling) will remain essential, especially as we electrify buildings and transportation in order to make sure that we only increase load as much as is necessary after energy efficiency measures have been	

			implemented. Electrification must be pursued in combination with energy efficiency in order to maximize savings. If deployed together, energy efficiency and electrification can deliver greater emissions reductions while improving indoor air quality. Not only does weatherization conserve energy in its own right, but it also makes building electrification easier and less expensive. It will be vital to ensure co-delivery of building upgrades that are currently delivered in silos (e.g. weatherization, electrification, storage, and rooftop/community solar).	
Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than the return on equity approved in the most recent rate case.	0		
Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a	+	Although higher electric rates might make it harder to electrify, CAM enables weatherization, which is vital for electrification efforts, as noted above.	

	monthly customer charge.			
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all transmission costs assessed by the EDCs.	0		
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design .	0		
Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.	+ or 0	By funding energy efficiency, may indirectly support electrification by making it cheaper to do so.	
	***Strategic Energy Management (SEM) Metric*:** The SEM metric is a long-term approach to advance	0	Insofar as the PIMs listed here supported energy efficiency, they may very indirectly help to make electrification easier.	The current regulatory framework does not include PIMs specifically related to electrification. Connecticut ratepayers would benefit from fuel-neutral or even electricity-favoring incentives for clean heating and

Performance Incentive Mechanisms[4]	energy efficiency that centers on setting goals for business engagement and energy savings.			cooling systems, as well as weatherization for all customers. Metrics that track fossil fuel displacement through electrification and weatherization are key. Additional terms that measure progress toward fossil fuel displacement might include the number of air-source heat pumps installed, the number of buildings weatherized, net MMBtu reduction across all fuels, or similar metrics.
	***Small Business Energy Advantage (SBEA)*:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified through the EDC's market segmentation analysis.	0		See SEM comments.
	***Energy Conscious Blueprint (ECB)*:** The ECB encourages implementation of energy efficiency during construction,	0		See SEM comments.

[4] The inclusion of Performance Incentive Mechanisms related to the Conservation and Load Management (C&LM) Plan is intended ***solely*** to ensure that any future regulatory mechanisms, metrics, or incentives developed through Docket No. 21-05-15 are not duplicative of the mechanisms already established by the Department of Energy and Environmental Protection in the C&LM Plan.

	major renovations, and in the new equipment marketplace by providing incentives for the non-residential building sector.			
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes customers to curtail energy use during periods of peak demand by enrolling eligible technologies.	0		See SEM comments.
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.	0		See SEM comments.
Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at	0		

	28% in 2022, increasing annually to 44% in 2030.			
Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and long-term plans to ensure continued developments for Connecticut's electric grid.	+	The EMG framework should support transportation electrification and building decarbonization.	
Equitable Modern Grid Programs	***Energy Storage Solutions Program*:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system.	+	The EMG framework should support transportation electrification and building decarbonization.	
	***Electric Vehicle Charging Program*:** The EV Charging program is designed, through a	+	The EMG framework should support transportation electrification and building decarbonization.	

	series of incentives, to meet the state's electric vehicle (EV) public policy objectives of deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.			
	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a procedural mechanism to accelerate the deployment and scalability of innovative pilots.	+	The IES program could support transportation electrification and building decarbonization depending on the nature of the programs and projects that are pursued.	
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection	+ or 0	May support electrification efforts by complementing other programs.	

	process for distributed energy resources, while ensuring safe, reliable, and economical interconnections.			
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.	+	May indirectly support transportation and building electrification.	

Overall, does the existing regulatory framework support achievement of this outcome?			**Discussion**
+	**YES** Incents Achievement	0 or -	Direct regulatory support for transportation electrification and decarbonization of buildings is minimal.
0	**NO IMPACT**		
-	**NO** Disincentivizes Achievement		

Outcome 5: Social Equity

Do the existing regulatory mechanisms and program sufficiently support the outcome?				
Key				
+	**Yes**	The mechanism or program **incents achievement** of this outcome.		
0	**No Impact**	The mechanism or program **does not seem to impact achievement** of this outcome.		
-	**No**	The mechanism or program **disincentivizes achievement** of this outcome.		
Existing Regulatory Mechanisms and Programs	**Description**	**Mechanism or Program's Effect on Outcome**		**Issues for Attention**
		Score (+/0/-)	**Discussion**	
Multi-Year Rate Plan (MRP)	Multi-year rate plans use general rate cases as the primary mechanism for setting utility rates and determining allowed utility revenues. Rate cases re-visit revenue requirements (based on cost of service and a 'reasonable' return on investment) and revenue collection from customers.	-	Multi-year rate plans create significant barriers for enabling meaningful stakeholder participation with groups and communities that are not traditionally a part of the ratemaking process. The technical expertise and financial resources needed to participate are significant obstacles to advancing the goals of social equity. Current planning process do not fully incorporate equity and environmental justice.	
Revenue Decoupling Mechanism	The Revenue Decoupling Mechanism decouples distribution revenues from the volume of electricity sales, with annual adjustments allowed.	+	Insofar as revenue decoupling removes disincentives against energy efficiency, it may support social equity.	

Earnings Sharing Mechanism (ESM)	The ESM returns a portion of revenue to customers and shareholders if the EDC earns more than the return on equity approved in the most recent rate case.	+	The ESM may enable ratepayers to receive compensation when EDCs over-earn, but reforms to COSR may have a larger impact on advancing social equity.	
Conservation Adjustment Mechanism (CAM)	The CAM ensures that the balance of revenues required to fund the combined electric and gas Conservation and Load Management Plan (C&LM Plan) is provided through a monthly customer charge.	+	By supporting the C&LM, the CAM helps to lower customer bills, energy burdens, and air pollution.	Cost-effectiveness testing for energy efficiency programs do not prioritize treatment of low- and moderate-income and environmental justice households, nor do cost-effectiveness tests fully account for the health and safety benefits of energy efficiency. In addition, the C&LM plan can do much more to advance social equity. Energy efficiency programs must prioritize the highest-emitting homes, which are often located in lower-income communities and in communities of color. Building shell inefficiency leads not only to higher emissions, but also to higher energy bills for residents—not just relative to household income, but in absolute terms. Targeting these homes for comprehensive retrofits will relieve the energy burden among low-income households and renters while substantially reducing emissions from the residential sector. Acadia Center's PowerHouse Home Energy Simulator demonstrates just how expensive the highest-emitting homes in the region can be to live in. For example, in Connecticut, one of the 25% highest-emitting homes would cost more than five times as much to heat each winter as a home built to that state's current building energy code. By setting enforceable targets for clean heating deployment and especially weatherization in lower-income homes can

				ensure that funding and attention are directed to the most impactful sectors.
Transmission Adjustment Clause (TAC)	The TAC adjusts the retail rate charged by each EDC for electric transmission services in order to recover all transmission costs assessed by the EDCs.	0		
Non-Bypassable Federally Mandated Congestion Charge (NBFMCC)	The NBFMCC is a recovery charge largely for costs associated with public policy initiatives and contracts, as well as the New England Standard Market Design .	0		
Systems Benefit Charge (SBC)	The SBC is a monthly charge that funds energy efficiency programs and assistance or hardship programs for income-eligible residential customers, public education, and other societal costs.	+	By supporting the C&LM, the SBC helps to lower customer bills, energy burdens, and air pollution.	
	***Strategic Energy Management (SEM) Metric*:** The SEM metric is a long-term approach to advance	0		

Performance Incentive Mechanisms[5]	energy efficiency that centers on setting goals for business engagement and energy savings.			
	Small Business Energy Advantage (SBEA)**:** The SBEA program for small commercial and industrial (C&I) customers offers services including installation of energy-efficient measures and on-bill financing, service for end-use equipment, and processes identified through the EDC's market segmentation analysis.	0		
	Energy Conscious Blueprint (ECB)**:** The ECB encourages implementation of energy efficiency during construction, major renovations, and in the new equipment marketplace by providing incentives	0		

[5] The inclusion of Performance Incentive Mechanisms related to the Conservation and Load Management (C&LM) Plan is intended ***solely*** to ensure that any future regulatory mechanisms, metrics, or incentives developed through Docket No. 21-05-15 are not duplicative of the mechanisms already established by the Department of Energy and Environmental Protection in the C&LM Plan.

	for the non-residential building sector.			
	***Demand-Side Management (DSM)*:** The residential DSM program incentivizes customers to curtail energy use during periods of peak demand by enrolling eligible technologies.	+	Indirectly advances social equity by reducing emissions.	
	***Home Energy Solutions – Income Eligible Program (HES-IE)*:** The HES-IE provides eligible customers with energy efficiency audits and core weatherization services.	+	HES-IE supports the advancement of social equity priorities.	
Renewable Portfolio Standard (RPS)	The RPS is a state policy that requires electric suppliers and EDCs providing standard service or supplier of last resort service to obtain a minimum percentage of their energy from qualified renewable energy resources – at 28% in 2022, increasing annually to 44% in 2030.	+ or 0	By supporting renewable energy, the RPS helps to lower customer bills and reduce air pollution, but these are indirect benefits and do not necessarily lead to improve social equity outcomes.	

Equitable Modern Grid (EMG) Framework	The EMG is a framework that describes actions for investigating methods to realize an equitable modern electric grid in Connecticut as well as for near-term and long-term plans to ensure continued developments for Connecticut's electric grid.	+	The EMG framework and the programs within it should play a key role in advancing social equity.	
Equitable Modern Grid Programs	***Energy Storage Solutions Program*:** The Energy Storage Solutions Program is a nine-year, statewide program for both residential and C&I customers to support the deployment of 580 MW of electric storage and to foster a more reliable and resilient electric distribution system.	+	The EMG framework and the programs within it should play a key role in advancing social equity.	
	***Electric Vehicle Charging Program*:** The EV Charging program is designed, through a series of incentives, to meet the state's electric vehicle (EV) public policy objectives of	+	The EMG framework and the programs within it should play a key role in advancing social equity.	

	deploying 125,000 – 150,000 by 2025 and 500,000 by 2030.			
	***Innovative Energy Solutions (IES) Program*:** The IES Program provides a procedural mechanism to accelerate the deployment and scalability of innovative pilots.	+ or 0	The EMG framework and the programs within it should play a key role in advancing social equity, but the effect of the IES will depend on which projects are ultimately pursued.	
	***DG Interconnection Working Groups*:** The Distributed Generation Technical Working Group (DGTWG) and Distributed Generation Policy Working Group (DGPWG) were formed to accelerate safe, reliable and economical interconnections of distributed energy resources in Connecticut and to investigate the interconnection process for distributed energy resources, while ensuring safe, reliable, and	+	Supports social equity by advancing a clean energy economy.	

	economical interconnections.			
Other Regulatory Mechanisms and Programs (if relevant)	***Clean and Renewable Energy Programs,*** Including the Residential Renewable Energy Solutions Program, the Non-Residential Renewable Energy Solutions Program, and the Shared Clean Energy Facility Program.	+	Supports social equity by advancing a clean energy economy.	

Overall, does the existing regulatory framework support achievement of this outcome?			**Discussion**
+	**YES** Incents Achievement	+ or -	While individual programs, especially within the nascent Equitable Modern Grid framework, may advance social equity, the overall framework of Cost-of-Service Regulation and the incentives it creates for EDCs do not support social equity.
0	**NO IMPACT**		
-	**NO** Disincentivizes Achievement		