Project Authorization Form

Date Prepared: 4/13/17	Project Title: Eversource Energy Center
Company/ies: Eversource CT	Project ID Number: RESENRGY
Organization: Distribution Engineering	Class(es) of Plant: Software
Project Initiator: [redacted]	Project Category: UCONN Energy Center
Project Owner/Manager: [redacted]	Project Type: Specific
Project Sponsor: [redacted]	Project Purpose: System Resiliency PURA Docket 12-0706RE01
Estimated in service date: 12/31/17	If Transmission Project: NA
Supplement to Existing Authorization? No	Capital Investment Part of Original Operating Plan Y
Eng./Constr. Resources Budgeted? N/A	O&M Expenses Part of the Original Operating Plan? Y

Project Authorization

Project authorization must be in accordance with the approval levels included in the Delegation of Authority Policy (DOA).

If Chief Executive Officer or subsidiary board approval is required, document the review by Enterprise Risk Management (ERM) and Financial Planning and Analysis (FP&A)

ERM: _____

FP&A: _____

Executive Summary

In accordance with the Two Storm Panel recommendation, the Settlement Agreement in Docket No. 12-01-07, and the approved System Resiliency program in Docket No. 12-07-06RE01, this initiative helps fund UCONN's collaborative research and development center (Eversource Energy Center) focused on managing the impact of severe weather events and improving power system resiliency.

Eversource has committed $9,000,000 over five years (2015-2019) to the Eversource Energy Center. Please refer to Table 1.0 for the total project request amount, which includes the committed amount and all associated project costs to support the sponsored research projects at the Center.
The following payment schedule is from the signed MOU (Memorandum of Understanding) between UConn and Eversource:

SCHEDULE A – PAYMENT SCHEDULE

Year	May 1	November 1	Total
2015	$750,000	$750,000	$1,500,000
2016	$900,000	$900,000	$1,800,000
2017	$950,000	$950,000	$1,900,000
2018	$950,000	$950,000	$1,900,000
2019	$950,000	$950,000	$1,900,000
Five Year Total			$9,000,000

The following research and development projects are being funded in 2017:

- *Next Generation Predictive Storm & Damage Modeling Enhancements for Preparedness and Emergency Response Support*
- *Stormwise: Vegetation Management and Modeling for Storm Resistant Trees, Resilient Power and Sustainable Futures*
- *Identifying Continuation and Recommended Funding Levels of Resiliency Programs Beyond 2017*
- *The Benefit of Investing in Resiliency: A Dynamic Economic Analysis*
- *Evaluation of Grid Resilience Activities with a Total System Performance Model*
- *Further Evaluation of LiDAR and Alternative Technologies for Monitoring Roadside Vegetation and Utility Infrastructure*
- *HVDC Grid Hardening against Geomagnetic Disturbance*
- *Evaluation of Substations Vulnerability of Flooding in Current and Climate Change Scenarios*
- *Grid-Side System Enhancements to Integrate Distributed Energy Resources*

Projects for 2018 and 2019 are to be determined.

Total project request: $10,302,120

Table 1.0

Funding request reconciliation:	
Funding to UCONN (2015-2019)	**$ 9,000,000**
Quantum Spatial payments*	$ 171,304
Final payment from prior agreement with UCONN**	$ 146,000
Sales tax (4.13%)	$ 384,805
Indirects (E&S, MDEC, AS&E, AFUDC)	$ 600,011
Total funding request	**$ 10,302,120**

* Quantum Spatial provided the LiDAR data for Uconn's 2015-2016 LiDAR project

** Invoiced in Dec 2014, paid in 1Q 2015 under new PO#

Project Costs Summary

	Actuals 2015-April 2017	2017 - Balance of Yr	2018	2019	Total * **
Capital Additions Direct	$ 3,551,122	$ 905,238	$1,541,873	$1,541,873	$ 7,540,107
Less Customer Contribution	$ -	$ -	$ -	$ -	$ -
Removals Net of Salvage	$ -	$ -	$ -	$ -	$ -
Total - Direct Spending	$ 3,551,122	$ 905,238	$1,541,873	$1,541,873	$ 7,540,107
Capital Additions - Indirect	$ 389,229	$ 26,604	$ 45,413	$ 47,263	$ 508,510
AFUDC	$ 48,268	$ 4,971	$ 18,420	$ 18,420	$ 90,079
Total Capital Request	$ 3,988,620	$ 936,813	$1,605,707	$1,607,557	$ 8,138,696
O&M	$ 976,998	$ 313,232	$ 436,597	$ 436,597	$ 2,163,423
Total Request	$ 4,965,617	$ 1,250,045	$2,042,304	$2,044,154	$ 10,302,120

* Total amount needed for authorization in PowerPlan based on total projected project costs

** Additional authorization of $5,202,120 is needed for future payments (current amount authorized in PowerPlan is $5,100,00)

Financial Evaluation

Direct Capital Costs	Actuals 2015 - April 2017	2017 - Balance of Yr	2018	2019	Total
Straight Time Labor					$ -
Overtime Labor					$ -
Outside Services	$ 3,551,122	$ 905,238	$1,541,873	$1,541,873	$ 7,540,107
Materials					$ -
Other, including contingency amounts					$ -
Total	$ 3,551,122	$ 905,238	$1,541,873	$1,541,873	$ 7,540,107
Indirect Capital Costs					**Total**
Indirects/Overheads (including benefits)	$ 389,229	$ 26,604	$ 45,413	$ 47,263	$ 508,510
Capitalized interest or AFUDC, if any	$ 48,268	$ 4,971	$ 18,420	$ 18,420	$ 90,079
Total	$ 437,497	$ 31,575	$ 63,834	$ 65,684	$ 598,589
Total Capital Costs	$ 3,988,620	$ 936,813	$1,605,707	$1,607,557	$ 8,138,696
Less Total Customer Contribution	$ -	$ -	$ -	$ -	$ -
Total Capital Project Costs	$ 3,988,620	$ 936,813	$1,605,707	$1,607,557	$ 8,138,696
Total O&M Project Costs	$ 976,998	$ 313,232	$ 436,597	$ 436,597	$ 2,163,423
Total Project Cost	**$ 4,965,617**	**$ 1,250,045**	**$2,042,304**	**$2,044,154**	**$ 10,302,120**