Date Prepared: 02/25/2019	Project Title: DER Hosting Capacity
Company/Companies: Eversource CT	Project ID Number: Hostmapp
Organization: GIS Mapping	Plant Class/(F.P.Type): Intellectual Property
Project Initiator: [redacted]	Project Type: Specific
Project Owner/Manager: [redacted]	Project Category: GRID MODERNIZATION
Project Sponsor: [redacted]	Project purpose: Reliability
Current Authorized Amount: $0	Estimated in service date(s): 12/31/2018
Supplement Request: $300K	
Total Request: $300K	

Project Authorization Supplement Justification

This request is for supplemental funding in the amount of $300K for the DER Hosting Capacity. This project is to determine grid hosting capacity for intermittent renewable energy sources requiring active, real-time, large scale and integrated management of distributed generation incorporating the hosting capacity analysis in the EDCs' distribution system planning process starting with the creation of DG Hosting Capacity maps.

Project Need Statement *(Description of Issue)*

Since the existing grid was designed for unidirectional electricity flows only, there is a limited capacity to integrate intermittent generation sources. To determine grid hosting capacity for intermittent renewable energy sources requires active, real-time, large scale integrated management of distributed generation. Aggregate information about existing and in queue DER projects to develop online mapping and other analytical tools to better understand the localized impact of DER penetration for select locations.

Project Scope

- Develop automated processes to run feeder load flow/DER capacity tools and output results to industry standard format
- Eversource GIS IT/Infosys resources to implement dynamic integration between Synergi results and ESRI GIS Spatial Database Engine to reflect output on a predefined Thematic map
- Validate each circuit utilizing Synergi load flow results, identify errors and correct

Project Benefits:

- Proactive identification of areas where energy storage or advanced voltage management have the greatest potential benefit
- Increased efficiency in the interconnection process

Project Authorization Supplement Cost Summary

Supplement (dollars in thousands)			
	Prior Authorized	**Supplemental Request**	**Total**
Capital Additions - Direct	$ -	$ 275	$ 275
Less Customer Contribution	$ -	$ -	$ -
Removals net of Salvage____%	$ -	$ -	$ -
Total Direct Spending	$ -	$ 275	$ 275
Capital Additions - Indirect	$ -	$ 21	$ 21
AFUDC	$ -	$ -	$ -
Total Capital Request	$ -	$ 296	$ 296
O&M	$ -	$ -	$ -
Total Request	**$ -**	**$ 296**	**$ 296**

Total Supplement Request by year view:				
	Prior/2017	**2018**	**2019**	**Total**
Capital Additions - Direct	3	259	13	275
Less Customer Contribution	-	-	-	
Removals net of Salvage____%	-	-	-	
Total Direct Spending	3	259	13	275
Capital Additions - Indirect	-	17	3	21
AFUDC	-	-	-	-
Total Capital Request	3	276	16	296
O&M	-	-	-	-
Total Request	**3**	**276**	**16**	**296**