EVERSOURCE

Project Approval Form

Project Title: GRE, [redacted]	**Project Number:** [redacted]
Date Prepared: 07/17/2025	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Distributed Generation
Project Initiator: [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**Capital Investment part of original Op Plan:** No
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply)**:** ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: 3/1/26	**NWS Excludable:** ☒ Yes ☐ No
Total Capital Request: $805.4K, 100% reimbursable	**Authorization Type:** Full Funding

1. Executive Summary

Full Funding is being requested for $805.4K, 38% over the Partial Funding estimate of $581.8K, a difference of $223.6K. The overage is due to the following reasons:

1) Indirects/overheads charges: $175.4K higher than estimated in the Partial Funding PAF from 2023.
2) Material: $50.2K higher than estimated. Material costs have trended higher over the last two years since the Partial Funding.

The purpose of this request is to approve the full funding request of $805.4K which is 100% reimbursable. The customer underwent a facility study to get detailed engineering, with a +/-10% contingency. The projected in-service date is March 1, 2026. The total to be collected from the customer and included in the interconnection agreement is $777,095, which includes a 15% CIAC tax and standard $2,000 witness test fee. The costs in the interconnection agreement also includes money allocated for reprogramming substation relays to support [redacted]. Note, the difference between the original capital request and current capital request is a reduction of $141.6K, or approximately 20%. The difference in cost also comes from the preliminary engineering using the AIMS cost units (CUs) whereas the detailed engineering was written in Maximo using those CUs. The detailed engineering includes the cost for rock drilling for [redacted] poles. The customer has authorized construction.

GRE, [redacted], Stonington is proposing a photovoltaic (PV) generator at their facility located on [redacted], Stonington. The proposed project will interconnect near pole [redacted] with a rating of 4.999 MW. The proposed GRE, [redacted] Stonington project will interconnect to the [redacted]. A distribution system impact study determined that the proposed project will need [redacted] three-phase new service with a site-dedicated recloser and [redacted] primary meter. [redacted], as determined under [redacted], previously. A three-phase line extension of [redacted] will also be necessary down [redacted] between the intersection of [redacted] and the project POI at approximately pole [redacted]. A dynamic study determined that there are risks of Transient Overvoltage (TOV). The customer will be required to implement their surge protection overvoltage (SPOV) settings on the inverters to dampen the TOV response. Per ISO-NE, a transmission study was not required and a PP5 was filed accordingly. Transmission Planning conducted the Level 0 study with confirmation of no adverse impact.

The DER will be able to operate on alternate feeder configurations [redacted]). There were no thermal violations experienced when the project is fed from [redacted]. 3V0 is capable with existing hardware at [redacted] transformer. A separate substation project is being developed to update the settings in the existing relays to support 3V0 protection. $25,000 was allocated toward 3V0 activities.

The DER will be required to operate in a ramp rate to mitigate flicker concerns on the primary and alternate feeder configuration. The DER will also be required to operate with the Volt/VAR mode **enabled** to mitigate high voltage concerns caused by the phase imbalance on the [redacted] feeder.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	2025	2026	2027	Total
Internal Labor and Construction Equipment	103.6	0.0	0.0	103.6
Outside Services	125.9	0.0	0.0	125.9
Materials	126.6	0.0	0.0	126.6
Removals	11.6	0.0	0.0	11.6
Other	56.2	0.0	0.0	56.2
Risk and Contingency	4.6	0.0	0.0	4.6
Subtotal	**428.4**	**0.0**	**0.0**	**428.4**

Indirect Capital Costs				
Indirects/Overheads (including benefits)	376.9	0.0	0.0	376.9
Capitalized interest or AFUDC, if any	0.0	0.0	0.0	0.0
Subtotal	**376.9**	**0.0**	**0.0**	**376.9**
Total Capital Costs (Gross)	**805.4**	**0.0**	**0.0**	**805.4**
Less Total Customer Contribution	**-805.4**	**0.0**	**0.0**	**-805.4**
Project Costs (Net)	**0.0**	**0.0**	**0.0**	**0.0**

Explain unique payment provisions, if applicable:

3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Greenskies approached Eversource in July 2020 regarding a [redacted], Stonington, CT as a new construction. A feasibility study agreement was issued to Greenskies in July 2020. The customer authorized the feasibility study agreement in February 2021. An impact study agreement was then issued to Greenskies in August 2021. The customer authorized the impact study in September 2021. A facility study agreement was issued to Greenskies in April 2022. The customer executed the facility study agreement in June 2023.

The studies identified that capacity exists at [redacted] to host the proposed [redacted] The DER customer will just be required to perform a three-phase line extension down [redacted] and install a three-phase primary service. [redacted] will be converted to backbone.

b. Project Need

This is an interconnection requirement. The proposed solutions are standard industry practice for the issues that were identified in the system impact study.

c. Project Scope

The project will begin once the generating customer executes an interconnection agreement authorizing the Company to begin construction. The generating customer will also be required to pay for their construction in a payment schedule as outlined in the interconnection agreement. Once construction is authorized, Eversource will work to put the project on the schedule.

The following is a list of major material that will be required to complete this project:

[redacted]

4. Alternatives Considered

The project is a compliance obligation. There were no alternatives considered. There is no financial benefit. The customer's frontage is fed by the [redacted] feeder. There was no need to review alternate feeders.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval	11/16/23
100% Detailed Engineering Completion	12/29/23
Fully Funded	7/17/25
Construction Start	10/1/25
In Service Date	3/1/26

6. Regulatory Decisions

7. Codes and Standards

8. Risk and Contingencies

Contingencies:

A 10% contingency was added, standard for projects that undergo a facility study.

Risk Mitigation:

No additional dollars were included for risk; but undergoing a facility study will reduce the risk of a higher estimate based on the tabletop review.

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2025	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues.
Customer Permission / Siting Council / Municipal approvals	2025	Low	Design to minimize customer impact. Project Preplanning and customer/community outreach.
Internal construction resources not available to perform the work.	2025	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2025	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Materials Shortage or long lead times	2025	Low	Pre-order long lead time material; minimize the use of non-standard and non-stocked material.
Storm delays	2025	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2025	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2025	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.

Wetlands / Environmentally sensitive area	2025	Low	Use of mats and specialty equipment, only work during certain times of the year.

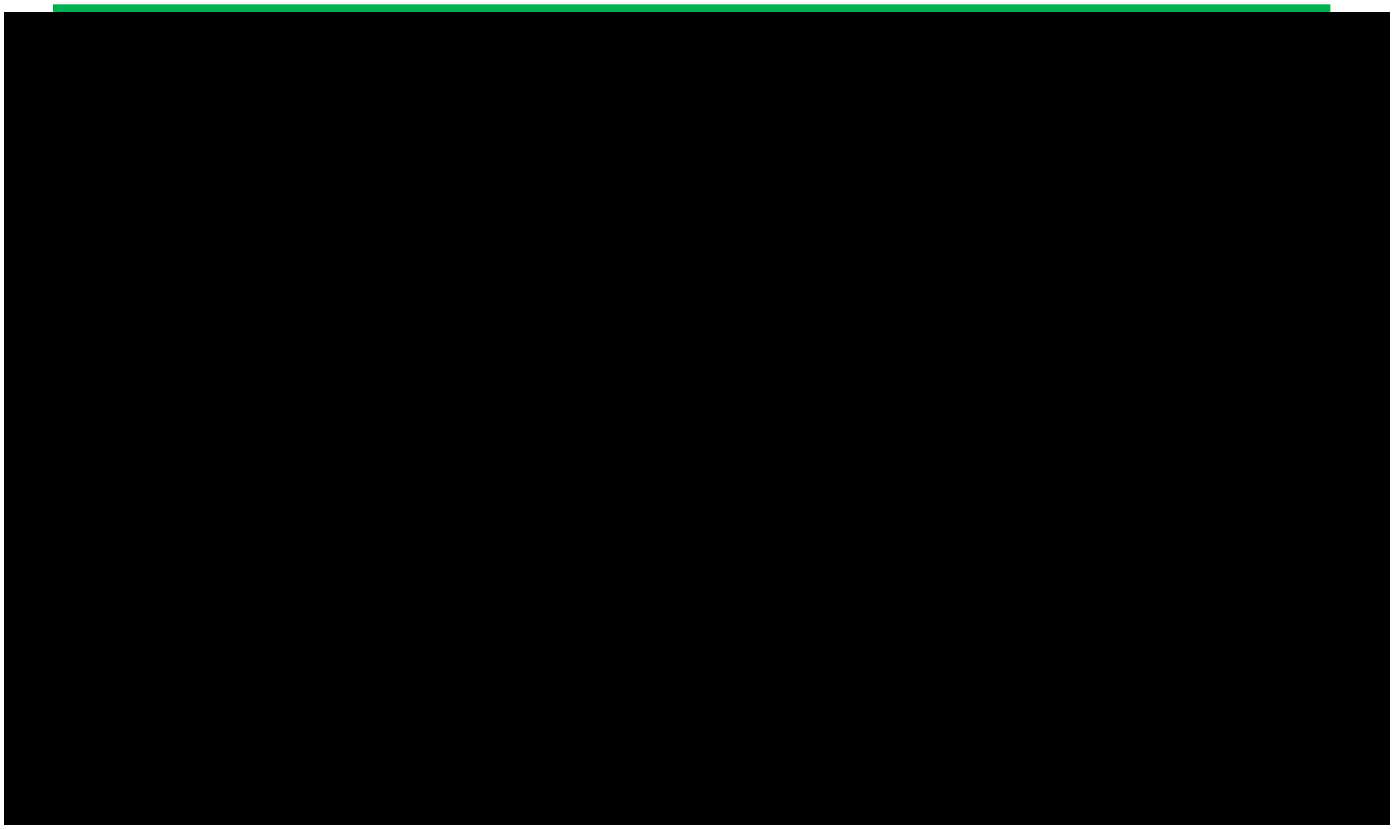
9. References

References
1. DSEM- Distributed Generation- Remote monitoring and control- 7.0
2. DSEM- Distributed Generation- General Standards- Large scale DER 1.4.1
3. DSEM- New Service- NB-3-7a
4. DER Planning Guide

10. Attachments (One Line Diagrams, Images, etc.)

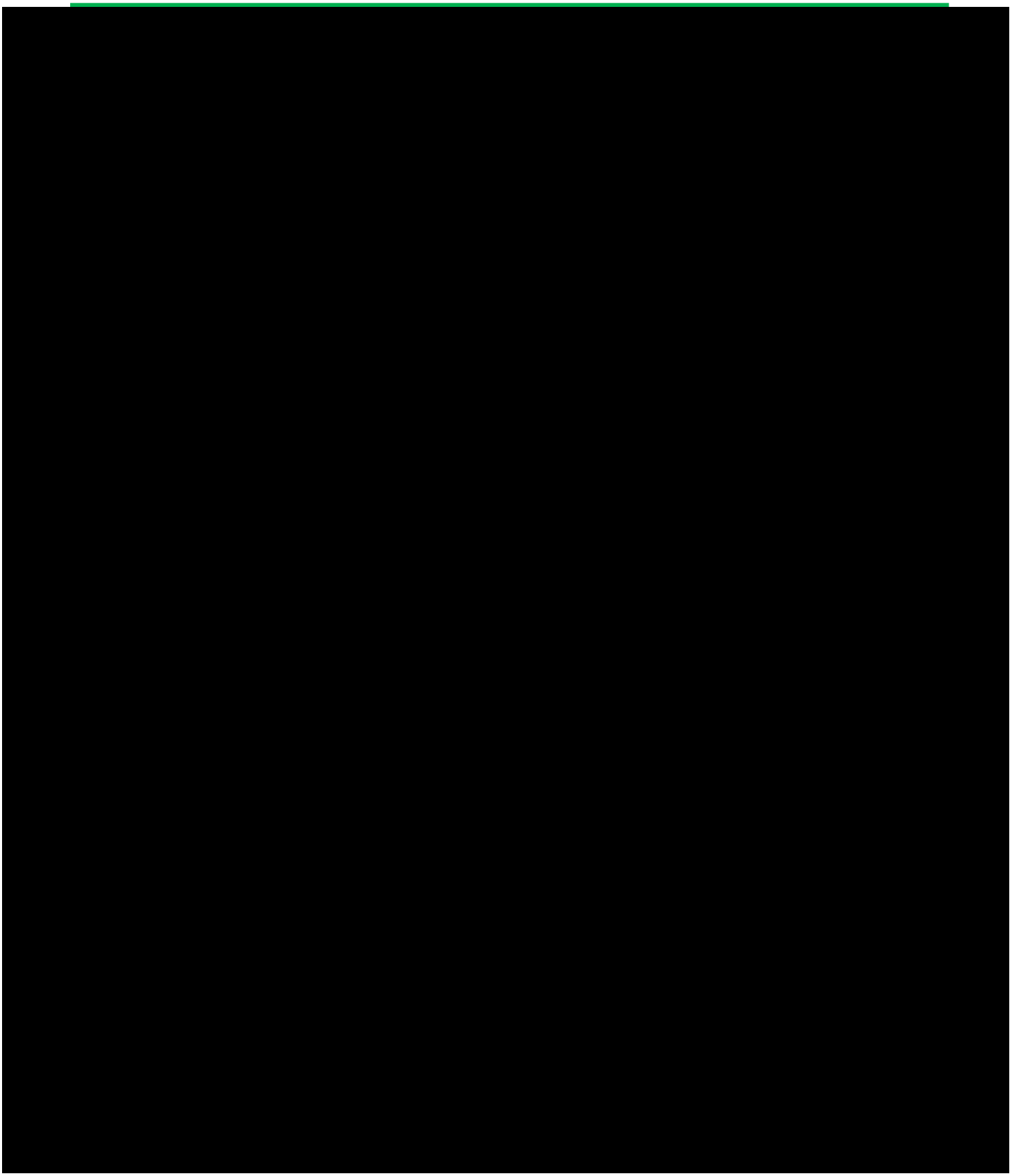
Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*
C. One-line	*YES*











Project Approval Form



EVERSOURCE

Project Approval Form

Project Title: GRE, Jeremy Hill Road	**Project Number:** CD01705
Date Prepared: 11/16/2023	**Company:** Eversource CT
Organization: Distributed Energy Resource Planning	**Project Category:** Generation/Interconnection
Project Initiator [redacted]	**Project Type:** Specific
Initiating Organization: Distributed Energy Resources	**Capital Investment part of original Op Plan:** No
Project Manager: [redacted]	**Emergency Related Request?** No
Project Sponsor: [redacted]	**Facility Type** (check all that apply): ☐ PTF ☐ non-PTF ☒ Distribution ☐ N/A (General Plant)
Required in service date: March 1, 2025	
Total Capital Request: $581.8K, 100% reimbursable	**Authorization Type:** Partial Funding

1. Executive Summary

The purpose of this request is to approve the partial funding request of $581.8K which is 100% reimbursable. The project was previously brought to CPAC with a capital cost of $723.4K. The customer underwent a facility study to get detailed engineering, with a +/-10% contingency. The projected in-service date is March 1, 2025. The total to be collected from the customer and included in the interconnection agreement is $777,095, which includes a 15% CIAC tax and standard $2,000 witness test fee. The costs in the interconnection agreement also includes money allocated for reprogramming substation relays to support [redacted] Note, the difference between the original capital request and current capital request is a reduction of $141.6K, or approximately 20%. The difference in cost includes a reduction of contingency from 24% to 10%. In addition, the preliminary estimate was budgeted for internal crews whereas the detailed engineering is budgeted for contractor crews. The difference in cost also comes from the preliminary engineering using the AIMS cost units (CUs) whereas the detailed engineering was written in Maximo using those CUs. The detailed engineering includes the cost for rock drilling for [redacted] poles. Full funding will be presented after the customer authorizes construction.

GRE, [redacted] Stonington is proposing a photovoltaic (PV) generator at their facility located on [redacted] Stonington. The proposed project will interconnect near pole [redacted] with a rating of [redacted] The proposed GRE, Jeremy Hill Road, Stonington project will interconnect to the [redacted] circuit. A distribution system impact study determined that the proposed project will need one (1) three-phase new service with a site-dedicated recloser and one primary meter. 3V0 is not required at [redacted] as determined under CD00794 and CD01244, previously. A three phase line extension of 3,516 feet will also be necessary down [redacted] between the intersection

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Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1

of [redacted] and the project POI at approximately pole [redacted]. A dynamic study determined that there are risks of Transient Overvoltage (TOV). The customer will be required to implement their surge protection overvoltage (SPOV) settings on the inverters to dampen the TOV response. Per ISO-NE, a transmission study was not required and a PP5 was filed accordingly. Transmission Planning conducted the Level 0 study with confirmation of no adverse impact.

The DER will be able to operate on alternate feeder configurations (Mystic 13K1). There were no thermal violations experienced when the project is fed from [redacted] is capable with existing hardware at [redacted] ransformer. A separate substation project is being developed to update the settings in the existing relays to support 3V0 protection. $25,000 was allocated toward 3V0 activities.

The DER will be required to operate in a ramp rate to mitigate flicker concerns on the primary and alternate feeder configuration. The DER will also be required to operate with the Volt/VAR mode **enabled** to mitigate high voltage concerns caused by the phase imbalance on the [redacted] feeder.

2. Project Cost Summary

Note: Dollar values are in thousands.

Capital Costs	Year 2024	Year 2025	Year 2026+	Total
Direct Capital Costs				
Internal Labor and Construction Equipment	34.5	0.0	0.0	34.5
Outside Services	187.5	0.0	0.0	187.5
Materials	76.4	0.0	0.0	76.4
Removals	78.0	0.0	0.0	78.0
Risk and Contingency	3.8	0.0	0.0	3.8
Other	0.0	0.0	0.0	0.0
Subtotal – Direct Costs	**380.3**	**0.0**	**0.0**	**380.3**
Indirect Capital Costs				
Indirect/Overheads (including benefits)	189.0	0.0	0.0	189.0
Capitalized interest or AFUDC, if any	12.5	0.0	0.0	12.5
Subtotal – Indirect Costs	**201.5**	**0.0**	**0.0**	**201.5**
Total Gross Capital Costs	**581.8**	**0.0**	**0.0**	**581.8**
Customer Contribution	**-581.8**	**0.0**	**0.0**	**-581.8**
Total Net Capital Project Costs	**0.0**	**0.0**	**0.0**	**0.0**

The below table illustrates the total cost that will be shared with the customer in the interconnection agreement. It includes a CIAC contribution as well as a witness test fee. The project is 100% reimbursable.

Distribution cost	$648,996
Substation cost	$25,000
CIAC 15%	$101,099
Total Distribution cost	$775,095
Witness Test	$2,000
TOTAL COST **paid by customer**	$777,095

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3. Technical Justification

Background, Project Need/Justification, and Project Scope

a. Background

Greenskies approached Eversource in July 2020 regarding a [redacted] Stonington, CT as a new construction. A feasibility study agreement was issued to Greenskies in July 2020. The customer authorized the feasibility study agreement in February 2021. An impact study agreement was then issued to Greenskies in August 2021. The customer authorized the impact study in September 2021. A facility study agreement was issued to Greenskies in April 2022. The customer executed the facility study agreement in June 2023.

The studies identified that capacity exists at [redacted] The DER customer will just be required to perform a three-phase line extension down Jeremy Hill Road and install a three-phase primary service. [redacted] will be converted to backbone.

b. Project Need

This is an interconnection requirement. The proposed solutions are standard industry practice for the issues that were identified in the system impact study.

c. Project Scope

The project will begin once the generating customer executes an interconnection agreement authorizing the Company to begin construction. The generating customer will also be required to pay for their construction in a payment schedule as outlined in the interconnection agreement. Once construction is authorized, Eversource will work to put the project on the schedule.

The following is a list of major material that will be required to complete this project:

[redacted]

4. Alternatives Considered

The project is a compliance obligation. There were no alternatives considered. There is no financial benefit. The customer's frontage is fed by the 32P4 feeder. There was no need to review alternate feeders.

5. Project Schedule

Add any additional milestones that are pertinent to the project

Milestone/Phase Name	Estimated Date
Partial Approval (Facility Study Design)	November 16, 2023
Customer Authorizes Interconnection Agreement	December 29, 2023
Fully Funded	June 1, 2024
Construction Start	September 1, 2024
In Service Date	March 1, 2025

6. Regulatory Decisions

Nonapplicable.

7. Codes and Standards

Nonapplicable.

8. Risk and Contingencies

Contingencies:

A 10% contingency was added, standard for projects that undergo a facility study.

Risk Mitigation:

No additional dollars were included for risk; but undergoing a facility study will reduce the risk of a higher estimate based on the tabletop review.

Risk Event	Risk Horizon	Likelihood of Occurrence	Risk Mitigation
Actual cost higher than estimated due to scope changes.	2024	Low	Included contingency costs in the funding request. Perform detailed Field Analysis and walk down in project development to avoid potential issues. Ongoing facility study will reduce the chance of costs coming in higher than expected.
Customer Permission / Siting Council / Municipal approvals	2024	Medium	Design to minimize customer impact. Project Preplanning and customer/community outreach. Most of the scope of work is in rural/residential areas. Customer permission and approvals may be a challenge.
Internal construction resources not available to perform the work.	2024	Medium	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost.
Internal engineering resources not available to perform the work.	2024	Low	Plan internal resources to perform the work. Use competitive bidding to ensure lowest outside labor cost. Facility study is currently being performed by Eversource personnel
Materials Shortage or long lead times	2024	Medium	Pre-order long lead time material; minimize the use of non-standard and non-stocked material. Sufficient time exists to order the long lead items.

Storm delays	2024	Low	If storm activity delays work, we may be forced to use external resources.
System abnormal configuration	2024	Low	Schedule work to minimize system abnormal time. Install temporary bypasses/equipment if system will be abnormal for extended periods.
Technological risks involving integration of new technology	2024	Low	Before use of new technology ensure support of standards and manufacturer. Schedule project to accommodate for extra time or ensure new technology is not on the critical path.
Wetlands / Environmentally sensitive area	2024	Low	Use of mats and specialty equipment, only work during certain times of the year.

9. References

References
1. DSEM- Distributed Generation- Remote monitoring and control- 7.0
2. DSEM- Distributed Generation- General Standards- Large scale DER 1.4.1
3. DSEM- New Service- NB-3-7a
4. DER Planning Guide

10. Attachments (One Line Diagrams, Images, etc.)

Attachment	Included in Submittal?
A. Cost Estimate	*YES*
B. Geographic Map	*YES*

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Refer to Distribution Capital Project Approval Process
JA-AM-2001-B, Rev.1



