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50 Leavenworth Street P.O. Box 1110 Waterbury, CT 06702

February 24, 2020

VIA ELECTRONIC MAIL AND HAND DELIVERY

Attorney Melanie Bachman Executive Director Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

Re:

PETITION NO. 1310A – Quinebaug Solar, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 50 megawatt AC solar photovoltaic electric generating facility on approximately 561 acres comprised of 29 separate and abutting privately-owned parcels located generally north of Wauregan Road in Canterbury and south of Rukstela Road and Allen Hill Road in Brooklyn, Connecticut

Dear Attorney Bachman:

In connection with the above-referenced Petition No. 1310A, enclosed please find an original plus fifteen (15) copies of The Connecticut Light and Power Company Doing Business As Eversource Energy Proposed Findings of Fact.

Very truly yours,

Marianne Barbino Dubuque

MBD/mkw Enclosures

cc: Service List dated January 15, 2020 attached (with enclosure)

Date: January 15, 2020

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LIST OF PARTIES AND INTERVENORS <u>SERVICE LIST</u>

	Document Status Holder Representative				
Status Granted	Service	(name, address & phone number)	(name, address & phone number)		
			(name, address to phone number)		
Applicant	⊠ E-mail	Quinebaug Solar, LLC	David W. Bogan, Esq. Locke Lord LLP 20 Church Street Hartford, CT 06103 Phone: (860) 541-7711 Fax: (866) 877-2145 david.bogan@lockelord.com Kathryn E. Boucher, Esq. Locke Lord LLP 20 Church Street, 20th Floor Hartford, CT 06103 Phone: (860) 541-7714 kathryn.boucher@lockelord.com Hagen Lee Quinebaug Solar, LLC c/o NextEra Energy Resources, LLC 700 Universe Boulevard, E5E/JB Juno Beach, FL 33408 Phone: (561) 694-4012		
Party (Approved 9/19/17)	⊠ E-mail	Troy and Meghan Sposato 192 Wauregan Road Canterbury, CT 06331 megsposato@yahoo.com tsposato9@yahoo.com	hagen.lee@nexteraenergy.com		
Party (Approved 1/2/20)	⊠ E-mail	The Connecticut Light and Power Company d/b/a Eversource Energy	Marianne Barbino Dubuque, Esq. Carmody Torrance Sandak Hennessey LLP 50 Leavenworth Street P.O. Box 1110 Waterbury, CT 06702 Phone: (203) 578-4218 MDubuque@carmodylaw.com Kathleen M. Shanley Manager-Transmission Siting Eversource Energy P.O. Box 270 Hartford, CT 06141-0270 Phone: (860) 728-4527		

Date: January 15, 2020

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CONNECTICUT SITING COUNCIL

Quinebaug Solar, LLC petition for declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 50-megawatt AC solar photovoltaic electric generating facility on approximately 561 acres comprised of 29 separate and abutting privately-owned parcels located generally north of Wauregan Road in Canterbury and south of Rukstela Road and Allen Hill Road in Brooklyn, Connecticut

PETITION NO. 1310A

February 24, 2020

The Connecticut Light and Power Company
Doing Business As Eversource Energy

Proposed Findings of Fact

I. INTRODUCTION

- 1. On December 5, 2019, the Connecticut Siting Council (the "Council") voted to grant Quinebaug Solar, LLC's (the "Petitioner") Motion to Reopen and Modify the Council's December 7, 2017 denial without prejudice of a declaratory ruling, based on changed conditions in accordance with Connecticut General Statutes ("CGS") § 4-181a(b), for the construction, maintenance and operation of a 50 megawatt AC solar voltaic electric generating facility within the Towns of Canterbury and Brooklyn, Connecticut (the "Project"). (Council Decision re: Motion to Reopen dated 12/6/19)
- 2. On December 23, 2019, The Connecticut Light and Power Company d/b/a Eversource Energy ("Eversource") filed a Motion for Party Status with the Council to allow the Council to consider not only the Project proposed by the Petitioner, but also the facilities and upgrades to Eversource's transmission system that would be required for the Project. (Eversource 1; Eversource 2, p. 3)
- 3. At a regular meeting on January 2, 2020, the Council granted Eversource's request for party status. (Council Letter Re: Decision on Eversource's Request for Party Status dated 1/3/20)
- 4. On January 9, 2020, the Council sent notice to the Mayor of Norwich, notifying him of Eversource's proposed modification of an approximately 0.75-mile segment of existing electric transmission lines between Bean Hill Substation and Wawecus Junction in Norwich. The Council invited the City to seek Party or Intervenor status and participate in the public hearing scheduled for February 4, 2020, at which time the Council would evaluate Eversource's proposed modifications. (Council Letter to Mayor of Norwich re: Hearing Date)
- 5. Eversource also conducted outreach to the First Selectman of Canterbury and the Mayor of Norwich, informing both of its Motion for Party Status in this proceeding and its planned construction in each municipality. Eversource advised both officials of its previously conducted and planned outreach to property owners adjacent to the proposed construction and work sites. (Eversource 2, pp. 25-26)
- 6. On January 17, 2020, the Council issued interrogatories to Eversource. On January 28, 2020, Eversource submitted responses to Council interrogatories. (Council Interrogatories to Eversource; Eversource 3)

II. BACKGROUND

- 7. Pursuant to the terms of a Large Generator Interconnection Procedure that is included in Schedule 22 of the Independent System Operator of New England's ("ISO-NE") Tariff, it is Eversource's obligation to facilitate the installation of the necessary transmission systems and transmission system upgrades and equipment for power generator entities that request to interconnect to the Eversource Transmission System. Petitioner entered into a Large Generator Interconnection Agreement with ISO-NE and Eversource on February 4, 2019. (Eversource 2, p. 2)
- 8. Eversource would purchase 40.18% of the Project output via its Power Purchase Agreement with the Petitioner. (Quinebaug 1, p. 3-1; Eversource 3, CSC-001)

III. PROPOSED PROJECT

- 9. If the Project is approved, the facilities and upgrades to be owned by Eversource that would be necessary for the associated electrical interconnection to Eversource's electric transmission are (a) construction of a new switching station, to be named the Canterbury Switching Station (the "Switching Station") and two (2) transmission line tap sections and associated line support structures; and (b) separation of an approximately 0.75-mile segment of a double-circuit transmission line in Norwich. (Eversource 2, pp. 3-4)
- 10. Petitioner would construct numerous collection lines throughout the Project to convey electricity generated by the solar panels to the collector substation, which would be located directly adjacent to the Switching Station. Petitioner would construct the collection line(s) across Wauregan Road, and possibly other public roads, and transfer ownership of the line segment(s) that would be located within or across public roads to Eversource. Eversource would then lease the use of the line segment(s) to Petitioner. (Eversource 2, p. 23)
- 11. The ISO-NE System Impact Study Report issued July 16, 2018 concluded that the Project, along with the Switching Station and the identified network upgrades, would not cause any adverse impacts to the transmission system. Section I.3.9 approval was received from ISO-NE on October 24, 2018. (Quinebaug 1, p. 3-13)

Construction of the Switching Station

- 12. The new three (3) breaker ring bus configured Switching Station would be constructed on the site designated by the Project for interconnecting the generation output of the Petitioner's generating facility to the Eversource transmission system. (Eversource 2, p. 4)
- 13. The following equipment would be installed within the fence line of the Switching Station:
 - Three (3) 115-kV circuit breakers with foundations;
 - Seven (7) circuit breaker manually operated disconnect switches;
 - Three (3) motor operated disconnect switches;
 - Two (2) station service voltage transformers:
 - Nine (9) capacitor coupled voltage transformers to be installed in sets of three:
 - One (1) wave trap;
 - Two (2) line terminal structures;
 - Bus work, bus support and switch support structures and foundations;
 - A pre-fabricated control enclosure (approximately 24 feet by 40 feet by 12 feet) that would contain control panels, a DC battery system and security and communication systems;
 - A perimeter chain link fence (seven feet tall with an additional one foot of barbed wire fencing at the top for a total of eight feet) and similarly configured gates; and
 - Lightning masts, if required.

(Eversource 2, p. 6; Eversource 3, CSC-003)

14. The proposed Switching Station would be air insulated. Each breaker would contain approximately 60 pounds of sulfur hexafluoride, which would provide the insulation. (Transcr. 3, pp. 124-125)

- 15. The surface treatment inside the perimeter fence would consist of a four-inch (4") layer of traprock. (Eversource 3, CSC-003)
- 16. The site for the Switching Station consists of approximately one (1) acre located within an approximately 60-acre parcel south of Wauregan Road that is part of the Project. The Switching Station site is within and surrounded by an active sand and gravel operation, which is generally free of vegetation. (Eversource 2, p. 8)
- 17. No tree or vegetation removal would be required for the Switching Station. (Eversource 2, p. 8)
- 18. A new permanent access road would be constructed and maintained by Petitioner. Petitioner would convey the necessary rights to Eversource to use the road for access to the Switching Station. (Eversource 2, p. 8)

Construction of Transmission Line Tap Sections in Canterbury

- 19. Eversource's existing 115-kV 1607 Line, located adjacent to the Switching Station site on double circuit structures with the 115-kV 1505 Line, would be looped in and out of the Switching Station. The "break" in the 1607 Line as a result of the loop in would result in re-designation of the existing 1607 Line into two new 115-kV transmission lines: the 1132 Line (from the new Switching Station to Eversource's existing Killingly Substation) and the 1316 Line (from Eversource's existing Tunnel and Fry Brook Substations to the new Switching Station). (Eversource 2, p. 4)
- 20. Two (2) proposed single circuit weathering steel dead-end structures on foundations would be installed in the ROW adjacent to existing structure 7259, which currently supports both the 1607 and 1505 transmission lines. One of the proposed tap structures would support the new 1132 Line and the other tap structure would support the new 1316 Line. Both new structures would facilitate the transmission lines' interconnection to the Switching Station terminal structures. (Eversource 2, p. 7; Eversource 3, CSC-004)
- 21. The existing double-circuit structure 7259 would be modified by removing the 1607 Line arms and conductor. The remaining structure would continue to support the 1505 Line. (Eversource 2, p. 7)
- 22. If one of the 1132 or 1316 Lines is out of service, then the other line would be able to support the Switching Station and keep the Quinebaug facility in service. (Eversource 3, CSC-005)
- 23. Access to the transmission line taps would be provided by the new access road to be constructed by the Petitioner, or through the existing Eversource transmission ROW. (Eversource 2, p. 9)
- 24. In the area of the transmission line tap, limited vegetation removal would be required where vegetation has been allowed to grow within the maintained ROW. (Eversource 2, pp 8-9)

Separation of Double Circuit Transmission Line in Norwich

25. As part of ISO-NE's System Impact Study Report, it was determined that the Project's connection to the Eversource transmission system would result in the potential for an unacceptable risk of thermal overload in the event of a simultaneous interruption of both the 1000 and 1080 circuits. The proposed line separation would mitigate the possibility of the thermal overloads on the transmission system. (Eversource 2, p. 11)

- 26. Eversource would modify its transmission lines by separating its existing 115-kV 1000 and 1080 transmission lines that currently share the same structures, by replacing five (5) laminated wood double-circuit structures with ten (10) new weathering steel single-circuit monopoles. (Eversource 2, p. 11)
- 27. In addition to typical hardware and insulators, proposed lightning arrestors would be added to some of the new structures. (Eversource 2, p. 12)
- 28. The separation of the double circuit transmission line would be within the approximately 0.75 mile section of the existing 250 feet wide ROW between Bean Hill Substation and Wawecus Junction in Norwich (the "Line Separation Area"). No expansion of the ROW would be necessary; however, the current vegetation management area within the ROW would be expanded from approximately 50 to 70 feet wide to approximately 105 feet wide, resulting in conservatively, approximately 3.6 acres of clearing. However, trees within the remainder of the 250 feet wide ROW would remain in place. (Eversource 2, pp. 11-12, 17; Eversource 3, CSC-010)

IV. PROJECT CONSTRUCTION AND WORK PROCEDURES

Switching Station and Transmission Line Tap Sections in Canterbury

- 29. The construction activities for the Switching Station would be segmented as follows:
 - Mobilization and installation of temporary fencing;
 - Civil construction, as required to properly compact and grade the site, including
 installation of below grade foundations for the new control enclosure and other associated
 equipment and support structures;
 - Installation of the grounding grid and ground rods;
 - Installation of the underground race way (conduit, etc.);
 - Installation of the major equipment (transformers, disconnect switches, circuit breakers, etc.);
 - Installation of the new control enclosure (which would be delivered to the site in sections);
 - Installation of steep supporting structures;
 - Installation of permanent fencing and gates; and
 - Testing and commissioning.

(Eversource 2, p. 10)

- 30. Equipment used to perform the Switching Station construction work would include excavation equipment such as an excavator, backhoe, bucket loader and bulldozer, a compactor, dump trucks, all-terrain forklifts, pick-up trucks with tools, concrete trucks, and cranes. Electrical work would utilize boom trucks, drill rig and cable pulling equipment. (Eversource 2, p. 10)
- 31. Staging areas would be used for surface storage of construction materials, equipment, tools, and supplies for the work. Materials removed from the work may be temporarily accumulated and stored at the staging areas prior to transporting off-site for salvage and/or disposal. These areas may also be used for parking of the construction crew's personal vehicles, as well as for construction vehicles and equipment storage, and for performing minor maintenance on construction equipment. (Eversource 2, p. 17)

Separation of Double Circuit Transmission Line in Norwich

- 32. Mechanical methods would be used for clearing and vegetation removal. Eversource would conduct vegetation removal activities in accordance with its best management practices ("BMPs"). (Eversource 2, pp. 17-18)
- 33. Eversource would require the clearing contractor to use some or all of the following low-impact clearing methods, depending on site-specific considerations:
 - Take into consideration soil and weather conditions when scheduling vegetation removal activities, such as during periods of heavy rainfall;
 - Maximize the use of uplands for clearing access routes;
 - Use appropriately sized equipment for the site conditions, where possible, to minimize impacts; and
 - Where practical, cut brush close to the ground, leaving root systems and stumps, to provide additional soil stability.

(Eversource 2, p. 18)

- 34. Project construction would conform to BMPs for soil erosion and sedimentation ("E&S control"), including those provided in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control ("Connecticut Guidelines") and Eversource's BMPs. This would include the development of a project specific Stormwater Pollution Control Plan ("SWPCP") and registration under CT DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13. (Eversource 2, pp. 18-19)
- 35. Eversource would utilize an existing access to the ROW; however, a new permanent access road would be required within the ROW to access the structure locations. Timber matting would be utilized to construct temporary access roads through wetland W-1 to reach the structure locations. (Eversource 2, p. 19)
- 36. The existing access road off Philanne Drive would need to be widened slightly and improved with top grading to accommodate the safe passage of construction vehicles, emergency vehicles and equipment. Such improvements typically include trimming adjacent vegetation and widening roads, as needed, to provide a minimum travel surface that is approximately 12 to 16 feet wide (additional width may be needed at turning or passing locations). (Eversource 2, pp. 19-20; Transcr. 3, pp. 122-123)
- 37. Access roads would typically be graveled; however, where the access road traverses wetland W-1, timber construction mats would be used. E&S controls would be installed as needed before commencement of any improvements to, or development of, access roads. (Eversource 2, p. 20)
- 38. A work pad would be required at each transmission line structure location to stage material for final on-site assembly and/or removal, and to provide a safe, level work base for construction equipment. Typical work pads would be approximately 140 feet by 140 feet but may vary based on terrain. (Eversource 2, p. 20)
- 39. To facilitate future transmission line maintenance, access roads, structure work pads and pull pads in uplands would be left in place, unless the property owner requests their removal. No new permanent access roads or work pads are proposed in water resource areas. (Eversource 2, p. 20)

- 40. Structures would have either direct embed or concrete foundations, which would require the use of equipment such as augers, drill rigs and dump trucks. If groundwater is encountered, pumping (vacuum) trucks or other suitable equipment would be used to pump water from the excavated areas as the shaft is being drilled or as the structure is being set. The water would then be discharged in accordance with applicable regulatory requirements. (Eversource 2, p. 21)
- 41. Excavated soils generated during construction activities would not be stored or stockpiled in wetland areas or adjacent to a watercourse. (Eversource 2, p. 21)
- 42. Counterpoise installation would take place in accordance with the design. Depending on site-specific soil conductivity, supplemental grounding would be installed. Counterpoise would be installed using a quad "ditch witch" plow-cable trencher or similar equipment. (Eversource 2, p. 21)
- 43. Structure sections, components and hardware would be delivered to the individual structure locations and assembled on-site. After assembly, the area around direct embed foundations would be backfilled with processed gravel or other suitable backfill material. (Eversource 2, p. 21)
- 44. The repositioning of the conductors and shield wire would occur after the new structures have been erected. (Eversource 2, p. 22)
- 45. Once the new structures have been erected and the transmission lines energized, the existing structures would be demolished and removed. ROW restoration activities would include the removal of construction debris, signage, flagging and temporary fencing, as well as removal of construction mats and structure work pads that are designated for removal. Areas affected by construction would be re-graded as practical and stabilized using re-vegetation or other measures before removal of temporary E&S controls. (Eversource 2, p. 22)
- 46. Waste materials would be disposed of in accordance with Eversource's BMPs, applicable regulations or recycled consistent with applicable rules and regulations and Eversource's policies. Excess soils would be managed in accordance with Eversource's BMPs, applicable regulations and disposal facility policies. Dewatering during construction activities would be conducted in accordance with Connecticut Guidelines, Eversource's BMPs and applicable regulations. (Eversource 2, p. 22)

V. ENVIRONMENTAL CONSIDERATIONS

Switching Station and Transmission Line Tap Sections in Canterbury

- 47. Petitioner is responsible for civil construction work (including any pre- and post-construction protective measures, permits and monitoring requirements) prior to Eversource installing the proposed Switching Station, which is planned in the area adjacent to Petitioner's proposed new substation. Eversource conducted a site reconnaissance and reviewed publicly available environmental information resources (i.e., CT DEEP GIS, UCONN's Center for Land Use Education and Research, and CT ECO) and reviewed Petitioner's environmental documentation relative to the Switching Station location. (Eversource 3, CSC-002)
- 48. Based on information provided by Petitioner and Eversource's evaluation of the proposed Switching Station site and tap structure locations, construction and operation of the Switching

- Station and the tap structures at the site would have no substantial adverse environmental effects. (Eversource 2, p. 8)
- 49. In the area of the transmission line tap (1607/1505 Lines ROW), limited vegetation removal would be required where the vegetation has been allowed to grow within the Eversource maintained ROW to facilitate the use of existing access roads by large construction equipment. (Eversource 2, pp. 8-9)
- 50. Although the Switching Station site falls within a location mapped as New England Cottontail Focus Area, no protective measures are necessary or planned in the vicinity of the Switching Station because this area provides no suitable habitat for this species. The area is completely devoid of vegetation and has experienced substantial earth work as a result of sand and gravel mining operations. (Eversource 3, CSC-007)
- 51. Eversource would not be installing any equipment at the Switching Station that would increase noise levels at the property boundaries. (Eversource 3, CSC-013)
- 52. The introduction of the Switching Station and transmission line tap structures should not result in a significant visual effect on the surrounding area. Though Eversource would introduce new structures in the area, it would be in concert with Petitioner's development. The new structures would be set back approximately 1,000 feet from the road and would be approximately the same height as the existing 94 feet tall transmission line structure. The closest residence is approximately 1,000 feet from the proposed Switching Station and tap structures. (Eversource 2, p. 9; Transcr. 3, p. 117)

Separation of Double Circuit Transmission Line in Norwich

- 53. The Line Separation Area is not located within a National Diversity Data Base ("NDDB") Polygon. The nearest NDDB Polygon is located approximately 1.9 miles to the northeast. One federally-listed threatened species is known to occur near the ROW: the northern long-eared bat ("NLEB"; Myotis septentrionalis). The NLEB's range encompasses the entire State of Connecticut. (Eversource 2, p. 13)
- 54. The transmission line work would not be located near known maternity roost trees, nor would it be within 0.25 mile of a known NLEB hibernaculum. The nearest NLEB habitat resource is located approximately 35 miles to the southwest. Eversource's proposed activities are not likely to adversely affect NLEB. (Eversource 2, p. 13)
- 55. There are no scenic resources proximate to the ROW. The nearest public resource, the Yantic River Water Access, is located approximately 0.15 mile north of proposed structures 6804 and 6804A. (Eversource 2, p. 13)
- 56. Heritage Consultants, LLC conducted a Phase 1A/1B Cultural Resource Reconnaissance Survey of the work area. No significant artifacts or cultural resource locations were found. (Eversource 2, pp. 13-14)
- 57. No wetlands or watercourses were identified within the proposed work pad areas or the majority of the proposed access road. One wetland is located at the southwest limit of this work area, where Eversource would access the ROW. This wetland consists of a narrow hillside seep system that contains an interior shallow/narrow intermittent watercourse. This resource originates beyond the

(W3197615) 7

- Eversource ROW to the northwest and drains to the southeast. As the watercourse enters the cleared ROW, the stone/stand stream channel transitions to broad sheet flow losing the defined bank/channel before extending off the ROW again just east of Wawecus Junction. (Eversource 2, p. 14)
- 58. Eversource would utilize a temporary crossing of this wetland to gain access into the ROW for the proposed work activities, resulting in approximately 563 square feet of temporary wetland impact, limited to construction matting. Work would be conducted in accordance with Eversource's BMPs to avoid unnecessary impacts to wetland resources. (Eversource 2, p. 14)
- 59. Eversource would require the contractor to use low-impact clearing methods to remove brush vegetation to protect wetlands, watercourses, state-listed species and their habitats, and cultural resources. (Eversource 2, p. 18)
- 60. The work area is not located within or proximate to FEMA 100-year flood or 500-year flood zones. None of the new single-circuit monopoles would be located within flood zones. (Eversource 2, p. 14; Eversource 3, CSC-009)
- 61. There are no vernal pools located within or proximate to the work area. (Eversource 2, p. 14)
- 62. There are no surface or groundwater resources or public drinking water supply/private wells located within or proximate to the work area. The nearest public drinking water supply (water tank/tower) is located approximately 175 feet to the northwest of proposed Structure 6801A work pad. (Eversource 2, p. 15)
- 63. Upon completion of construction and during operation, the proposed line separation would have no effect on air quality. Potential, temporary construction-related mobile source emissions would include those associated with construction vehicles and equipment, but the potential air quality impacts would be de minimis. Such emissions would be mitigated using available measures such as limiting idling times of equipment, proper maintenance of vehicles and equipment, and watering/spraying to minimize dust and particulate releases, under the terms of contracts with contractors. All on-site and off-road equipment would meet the latest standards for diesel emissions, as prescribed by the U.S. Environmental Protection Agency. (Eversource 2, p. 15)
- 64. Upon completion of construction and during operation, the proposed line separation would have no effect on noise or sound pressure levels. During construction of Eversource's facilities, the temporary increase in noise would likely raise localized ambient sound levels immediately surrounding the work area. In general, the highest noise level from the type of construction equipment used for this work (e.g., backhoe, bulldozer, crane, trucks, etc.) is approximately 88 dBA at the source. (Eversource 2, pp. 15-16)
- 65. In general, year-round and seasonal visibility of the new proposed monopoles would be consistent with existing conditions. The current structures are approximately 85 feet tall. The new structure height increase of approximately ten (10) feet is not significant. Even with the addition of new structures and vegetation management activities necessary for construction, the ROW would retain sufficient tree cover and distances to receptors such that there would be no substantive increase of visibility to the surrounding area. (Eversource 2, p. 16; Transcr. 3, p. 117)
- 66. The nearest residence, located approximately 300 feet to the southeast, is set at an elevation that is substantially lower than the ROW; therefore, there is no direct line of sight to the existing structures

there today. Eversource will be working on the opposite side of the ROW, farther away from the residence. Even with the proposed ten (10) foot differential in height, Eversource does not anticipate that there would be any direct views of the new structures from that adjacent property, based on topography alone. Eversource would still leave some ROW edge as well, which will help to buffer if there were views from a second-story window; however, this is not anticipated based on Eversource's knowledge and visitation to the site. (Eversource 2, p. 16; Transcr. 3, p. 120)

- 67. Currently, direct views of the existing structures can only be achieved by looking directly north (from areas south/southwest) in-line parallel with the transmission corridor. (Transcr. 3, pp. 121-122)
- 68. Eversource's portions of the Project in Canterbury and Norwich would have no impact on identified resources within the Last Green Valley National Heritage Corridor. (Transcr. 3, p. 116)

VI. ELECTRIC AND MAGNETIC FIELDS

- 69. Along the property boundaries, the primary source of electric and magnetic fields associated with the interconnection facilities at the proposed Switching Station are the transmission lines and any distribution lines. The electric and magnetic fields in the vicinity of the proposed Switching Station would increase in the area beneath where the lines enter and interconnect to the Switching Station, which is on the west side of the existing transmission line corridor and the east side of the Switching Station. Away from the point of the interconnection, the changes to the fields would be negligible. (Eversource 2, p. 26; Eversource 3, CSC-012)
- 70. Any contributions to the electric and magnetic fields from the Quinebaug Substation immediately north of the proposed Switching Station would be negligible. (Eversource 3, CSC-012)
- 71. With regard to the circuit separation in Norwich, both the electric and magnetic fields directly beneath the existing transmission line would be slightly reduced as a result of the work. Changes in the fields at the edges of the ROW would be negligible. (Eversource 2, pp. 27-28)
- 72. Below is a summary of the modeled field levels along the circuit separation in Norwich.

Wawecus Junction to Bean Hill Substation		West ROW Edge	Max in ROW	East ROW Edge
Magnetic	Existing	2.2	78.4	24.0
Fields (mG)	Proposed	2.5	53.9	16.8
Electric Fields	Existing	0.04	2.33	0.39
(kV/m)	Proposed	0.04	1.85	0.44

(Eversource 2, p. 28)

73. The electric and magnetic fields from the proposed facilities would be well below the recommended maximum permissible exposure limits as recommended by the International Council on Non-Ionizing Radiation Protection ("ICNIRP") and the International Committee on Electromagnetic Safety ("ICES"). These limits are summarized below:

	Magnetic Field (mG)	Electric Field (kV/m)
ICNIRP	2000	4.2
ICES	9040	5 (in General)
	3040	10 (on ROW)

(Eversource 2, p. 29)

VII. PROJECT COST

- 74. The total cost of the facilities and upgrades to be constructed and performed by Eversource is currently estimated to be \$13.4 million, based on Eversource's non-binding good faith estimate to interconnect with the Project. This total cost reflects the following estimated component costs:
 - \$8.3 million for the work to construct the Switching Station;
 - \$1.8 million to loop the 1607 Line into the new three-breaker ring bus; and
 - \$3.3 million to separate the double-circuit 1000 and 1080 lines.

(Eversource 2, p. 5)

- 75. The Petitioner would pay for these facilities and upgrades. (Eversource 2, p. 5)
- 76. The separation of the double circuit transmission line in Norwich is the least cost alternative for Eversource. The alternative project would have been significantly more expensive and much longer, including new lines, new structures, and insulators. ISO-NE directed Eversource to implement the 1000 and 1080 double-circuit separation instead. (Transcr. 3, pp. 130-131)

VIII. ADDITIONAL CONSTRUCTION INFORMATION

- 77. Eversource anticipates that construction activities for its proposed facilities would commence in the summer of 2020 and be completed by the summer of 2021. (Eversource 2, p. 24)
- 78. Normal work hours would be from 7:00 a.m. to 7:00 p.m. Monday through Saturday. Sunday work hours may be necessary if delays occur due to inclement weather and/or outage constraints. (Eversource 2, p. 25)
- 79. Eversource plans to conduct door-to-door outreach to the property owners adjacent to the entrance to the proposed site of the Switching Station ahead of the start of construction to alert them of increased traffic and provide contact information for any questions. (Eversource 2, p. 25)
- 80. Eversource has conducted outreach to the property owner abutting the ROW where the 1080/1000 Line work would occur in Norwich. Eversource plans to conduct door-to-door outreach to the property owners adjacent to the entrance to the ROW ahead of the start of construction to alert them of increased traffic and provide contact information for any questions. (Eversource 2, p. 26)

IX. SAFETY AND SECURITY

81. All of Eversource's work would be designed, constructed and operated in accordance with sound engineering practices and in full compliance with Eversource's standards, the National Electrical Safety Code and good utility practices. (Eversource 2, p 24)

- 82. Security cameras and a card reading entry system would be installed at the Switching Station. The camera views would be transmitted to a remote monitoring facility. (Eversource 2, p. 7)
- 83. Lights would be installed at the Switching Station for any night work, such as for maintenance or for electrical switching operations. Typically, the lights would otherwise be turned off. (Eversource 2, p. 7)
- 84. The access road to Eversource's ROW off of Philanne Drive in Norwich, which would be upgraded, would continue to be gated. (Transcr. 3, pp. 122-123)
- 85. Eversource works with emergency response personnel on training for electric safety on an ongoing basis throughout the entire service territory. (Transcr. 3, pp. 133-134)

Respectfully submitted,

THE CONNECTICUT LIGHT AND POWER COMPANY DOING BUSINESS AS EVERSOURCE ENERGY

By:

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CERTIFICATION

I hereby certify that a copy of the foregoing Party's Proposed Findings of Fact has been electronically mailed / sent by U.S. Mail on this 24th day of February, 2020 upon all parties as referenced in the Connecticut Siting Council's Service List dated January 15, 2020.

Marianne Barbino Dubuque

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