EVERSOURCE ENERGY

56 Prospect Street,
P.O. Box 270
Hartford, CT 06103

May 2, 2016

Robert Stein, Chairman
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

Re: Stony Hill Substation Project

Dear Chairman Stein:

The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") is submitting an original and fifteen (15) copies of the attached request for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications at Stony Hill Substation in the Town of Brookfield, Connecticut ("Petition").

Eversource has provided written notice to First Selectman Stephen Dunn and all abutters notifying them of the proposed work in Brookfield, Connecticut and the Petition being filed with the Council.

A check in the amount of $625 for the required filing fee is also attached.

Sincerely,

Kathleen M. Shanley
Manager – Transmission Siting

Attachment: Petition

cc: Stephen Dunn, First Selectman, Town of Brookfield

THE CONNECTICUT LIGHT AND POWER COMPANY doing business as EVERSOURCE ENERGY

PETITION TO THE CONNECTICUT SITING COUNCIL
FOR A DECLARATORY RULING OF
NO SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT
FOR THE PROPOSED MODIFICATIONS TO
EXISTING SUBSTATION IN THE TOWN OF BROOKFIELD, CONNECTICUT

1. Pursuant to Section 16-50g et seq. of the Connecticut General Statutes, The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource" or the "Company") hereby petitions the Connecticut Siting Council ("Council") for a Declaratory Ruling that a Certificate of Environmental Compatibility and Public Need ("Certificate") is not required for proposed modifications to the Stony Hill Substation in Brookfield, Connecticut (the "Project") that are described herein. Eversource submits that no such Certificate is required because the proposed modifications would not have a substantial adverse environmental effect.

2. The purpose of the Project is to eliminate potential transmission system voltage criteria violations and regulate system voltage in the event of contingencies based on the results of the June 2014 Southwest Connecticut Area ("SWCT") Needs Assessment performed by the Independent System Operator of New England ("ISO-NE") and in accordance with the February 2015 SWCT Solutions Study, also performed by ISO-NE.

3. **Project Description**

The Project consists of modifications to Eversource's Stony Hill Substation ("Substation") on the Company's property ("Project area"), located at 49 Stony Hill Road in the Town of Brookfield, and the installation of a new Substation access road, also on Eversource property. The existing Substation is a 115- to 13.8-kV facility with two 115-kV transmission lines, two 115- to 13.8-kV transformers, two 37.8-MVAR capacitor banks, one 25.2-MVAR capacitor bank, two dynamic **volt-ampere reactive (var)** control unit trailers ("DVAR") and associated pad-mount transformers and ten 13.8-kV distribution circuits.

The proposed modifications to the Substation will consist of:

a) Removal of the two existing DVAR trailers and associated pad-mount transformers.

b) Installation of one 25-MVAR synchronous condenser inside a new metal-clad enclosure, which would be approximately 74 feet long by 35 feet wide by 33 feet high.

c) Installation of two radiators for synchronous condenser cooling.

d) Installation of one 12.47- to 115-kV step-up transformer. This transformer provides connection of the synchronous condenser, which operates at 12.47-kV, to the 115-kV bus at the Substation.

e) Installation of one 115-kV manual disconnect switch.

f) Installation of one 115-kV sulfur hexafluoride (SF_6) circuit breaker.

g) Installation of 115-kV bus support structures for the new equipment.

h) Installation of up to two new lightning masts for protection of the new equipment. The height of the lightning masts would be 60 feet.

i) Installation of foundations for the equipment and structures listed above.

j) Extension of the fence line and ground apron on the east side of the Substation to accommodate the new equipment on Eversource property. The fence would be extended approximately 200 feet east from the existing fence location. The north-south fence run will be approximately 200 feet, similar to the existing Substation north-south dimension. The replacement fence would be similar to the existing fence in height and appearance.

   A new 20 foot wide access gate would be located along the south side of the Substation expansion area.

   An existing stone wall will need to be removed to accommodate the expansion.

k) Installation of a new permanent gravel access road on south side of the Substation access road from Stony Hill Road, which would be located entirely on Eversource Property. The approximate length of the access road would be 700 feet long with a typical width of 20 feet. A new 20 foot wide access gate would be installed for the new access near Stony Hill Road.

l) Installation of underground conduits and cable, lightning arrestors, mounting and support structures, relay/controls to accommodate the new equipment.

m) Installation of additional security cameras, alarm system sensors and lighting would be installed on the proposed synchronous condenser control enclosure.

The proposed modifications to the Substation are shown on Attachment A: Drawing No. 11804-92001- Stony Hill Substation Yard Arrangement - Plan & Sections – CSC and Attachment B: Aerial Map.

The general sequence of Project activities is described below:

Construction Methods

The Substation modifications would be constructed, operated, and maintained in accordance with established industry practices and in accordance with the Company's BMPs and standards. The Project would also adhere to the conditions in federal and state permits obtained for the Project. Construction-related vehicular traffic would utilize Stony Hill Road to access the Project area. Project-related traffic is expected to be temporary and highly localized in the vicinity of the Substation.

Clearing

Some clearing would be required to accommodate the Substation expansion and the new access road. Eversource would clear 2.5 acres of trees and vegetation on Eversource property. No clearing would occur within the wetland resource areas on the property.

Clearing would be accomplished using mechanical methods and typically requires the use of flatbed trucks, brush hogs or other similar types of equipment, skidders, forwarders, bucket trucks for canopy trimming, feller bunchers for mechanical tree cutting, wood chippers, log trucks, and chip vans. Eversource would conduct vegetation removal activities in accordance with its best management practices in the Company's December 2011 Best Management Practices Manual: Connecticut ("BMPs") and applicable permit requirements.

Access Roads

Stony Hill Substation is currently accessed off of Stony Hill Road. The existing access road varies in grade and would not be able to accommodate the delivery of the synchronous condenser inside the Substation. Eversource considered improving the access road by increasing and leveling the grade; however, that work would not allow the appropriate clearance for the construction and delivery vehicles and would require a new retaining wall. In addition, the new retaining wall would have permanent wetland impacts on the north and east sides of the Substation. Installation of the new access road would also require grading and drainage.

The proposed new access road on south side of the Substation would be located entirely on Eversource Property and would avoid any impacts to the wetland areas around the Substation. The clearing width required for the access road installation would be 50 feet. The location of the proposed new access road is illustrated in Attachment B: Aerial Map.

The existing Substation access road from Stony Hill Road will also be used for the Project construction. The existing access road may need to be graded, widened, and/or reinforced with additional material for the safe passage of construction vehicles during the execution of the work. Access road improvements typically include removing adjacent vegetation, widening the road, as needed, to provide a minimal travel surface that is approximately 16 to 20 feet wide, and hardened (adding gravel).

Grading

Grading would be required for the new access road and for the proposed extension on the east side of the Substation so that the finished grade of the Substation with the modifications will match the existing Substation finished grade. Substantial fill would be required on the northeast corner of the Substation, extending up to 15 feet from the new Substation fence.

Substation Work

Following grading, site work would continue with installation of foundations, fence/ gate reconstruction and equipment installations. Construction vehicles and equipment associated with the substation work would include pickup trucks, bucket trucks, front loaders, reel and tractor trailers, bulldozers, pullers, tensioners, wood chippers, cranes, forklifts, side booms and dump trucks. The construction contractor is typically responsible for posting and maintaining construction warning signs along public roads near work sites and for coordinating the use of flaggers or police personnel to direct traffic, as necessary or required.

Soil Erosion and Sediment Control Installation

Construction of the Project would conform to best management practices for erosion and sedimentation ("E&S") controls, including those provided in the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the Company's BMPs.

Typical E&S control measures include, but are not limited to, straw blankets, hay bales, silt fencing, check dams, berms, swales, and sediment basins. Silt fence would be installed prior to construction to demarcate the line of construction and prevent migration of sediment or construction materials into wetlands and watercourses. Temporary E&S control measures would be maintained and inspected throughout the duration of the Project to ensure their integrity and effectiveness. Following the completion of construction, seeding and mulching would be used to permanently stabilize previously disturbed areas. The temporary E&S control measures would remain in place until the Project work is complete and all disturbed areas have been stabilized.

Restoration

Restoration activities would include the removal of construction debris, signs, flagging, and fencing. The access road would be left in place to facilitate future substation and transmission line maintenance. Areas affected by construction would be re-graded as practical and stabilized using revegetation or other measures before removing temporary E&S controls. Soil stabilizing methods, restoration and storm water management practices will be applied in accordance with temporary and permanent best management practices required by local, state and federal regulatory agencies and *Connecticut Guideline for Soil Erosion & Sediment Control (2002).* The construction activities would be in accordance with the Eversource BMPs and applicable permit requirements.

4. Existing Conditions

Scenic, Recreational and Cultural Resources

There are no designated scenic roads, recreational parks, forests, or trails within or adjacent to the Project area.

A review of previously recorded cultural (archeological and historic) resources on file with the Connecticut State Historic Preservation Office was completed by Heritage Consultants, LLC ("Heritage") during June of 2015. No previously recorded archaeological sites were noted within 500 feet of the Substation. In addition, Heritage determined that the Project area lacks depositional integrity; thus, it retains little, if any, potential to retain intact cultural deposits. As a result, this area was designated as

having a no/low probability for containing archeological resources. No previously recorded archeological sites or historic properties were identified within or adjacent to the Project area.

Wetlands, Watercourses, Surface Waters and Flood Zones

The Project would not result in negative effects to water resources.

No vernal pools were identified in the vicinity of the Project area. Water resources in the Project area and within 100 feet of the Substation were identified and delineated in accordance with state and federal wetland industry standard methodologies. Wetland field surveys were completed in spring 2015 and wetland and watercourse flag locations were GPS located.

The Project area is not located within any aquifer protection areas and is not within a 500- or 100-year flood zone.

Wildlife and Habitat

Eversource reviewed the Connecticut Department of Energy and Environmental Protection's ("CT DEEP") Natural Diversity Data Base to identify state-listed endangered, threatened, or special concern species in the vicinity of the Project's work activities. One state- and federally-listed endangered animal species with potential habitat was identified within the Project area. According to a data sharing agreement with the CT DEEP, Eversource is unable to publically identify any identified protected species. No portions of the Project area fall within a CT DEEP mapped critical habitat area.

Eversource is consulting with the CT DEEP and with the U.S. Fish and Wildlife Service to ensure that measures are undertaken to minimize the Project's potential impact to the identified species.

Substation Security Measures and Lighting

The Substation has existing security measures including security cameras, an alarm system and lighting for safety and security purposes.

5. The proposed modifications would not have a substantial adverse environmental effect because:

a) The Project would not result in negative effects to cultural, scenic or natural resources and the Project would employ measures (E&S controls and other BMPs), as appropriate, to protect adjacent resource areas.

b) The Project will result in some limited clearing for the proposed new access road and substation expansion. However, the proposed clearing would be limited and occur entirely on Eversource property.

c) The proposed modifications would result in a in an alteration of the Substation's visual appearance to a limited extent. However, all new equipment would be shorter than the tallest existing structure within Substation

d) The proposed modifications would not result in television or radio interference.

e) Sound-pressure levels at all points along properties lines would continue to comply with state regulations set out in Regulations of Connecticut State Agencies §§ 22a-69.-1 et seq.

f) Electric and magnetic field levels at the boundary of the Substation property would not change as a result of the modifications.

6. Schedule

Eversource proposes to begin construction in early 2017. Construction and restoration is expected to be completed by December 2018.

7. Community Outreach

On March 8, 2016, Eversource consulted with the municipal officials in the Town of Brookfield to brief them on the Project. During the meeting, Eversource also described the Petition letter to be sent to abutting property owners, which includes a dedicated toll-free Transmission Project "hotline" number and email address that the property owners may use

to contact Eversource with any questions or concerns about the Project. Eversource also provided representatives of the Town of Brookfield with written notice of the Petition filing.

8. Section 16-50k(a) of the Connecticut General Statutes provides that a Certificate of Environmental Compatibility and Public Need is needed for proposed modifications of a facility that the Council determines would have a "substantial adverse environmental effect." Eversource respectfully submits that the proposed modifications described above would not result in a substantial adverse effect on the environment or ecology, nor would they damage existing scenic, historical or recreational values. Accordingly, Eversource requests that the Council issue a Declaratory Ruling that no Certificate is required.

9. Communications regarding this Petition for a Declaratory Ruling should be directed to:

Kathleen M. Shanley
Manager - Transmission Siting
Eversource Energy
PO Box 270
Hartford, CT 06141-0270
Telephone: (860) 728-4532

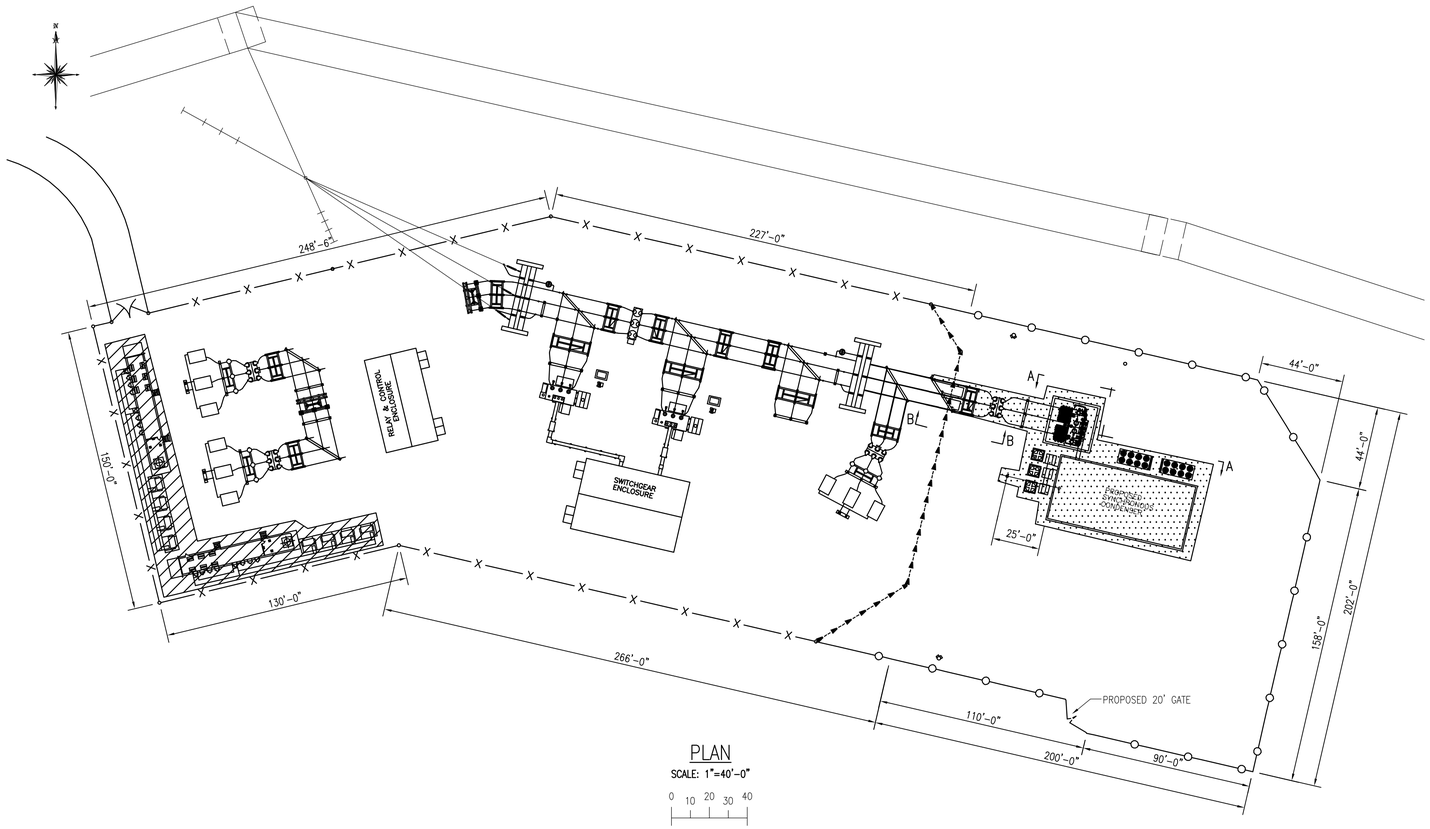
By: _____
Kathleen M. Shanley
Manager – Transmission Siting

Attachments:

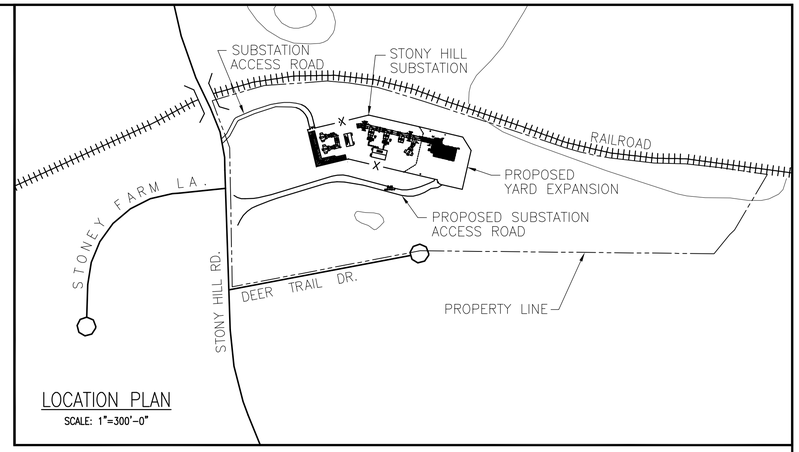
Attachment A: Drawing No. 15405-92001- Stony Hill Substation Yard Arrangement - Plan & Sections - CSC
Attachment B: Aerial Map
Attachment C: Letter to the Abutters and Affidavit of Service

ATTACHMENT A

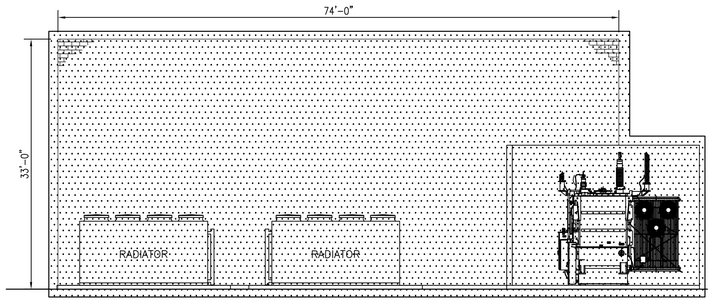
ES VER: 05/2015



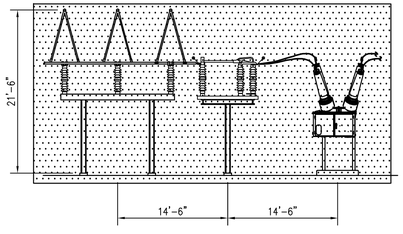
PLAN
SCALE: 1"=40'-0"
0 10 20 30 40



LOCATION PLAN
SCALE: 1"=300'-0"



SECTION A–A
SCALE: 1"=10'-0"



SECTION B–B
SCALE: 1"=10'-0"

2017 PROPOSED FENCE REMOVALS

2017 PROPOSED FENCE ADDITIONS

EXISTING FENCE

2018 PROPOSED REMOVALS

2018 PROPOSED ADDITIONS

NO.	DATE	AS BUILT REVISIONS	BY	CHK	APP	APP
2	2/03	ADD 115KV CAPACITOR W.O. #40091901	MC	REM	REM	
1	12/90	ISSUED FOR CSC APPROVAL 1990 ADDITION	MC	REM	REM	PSM

EVERSOURCE ENERGY

TITLE
STONY HILL
YARD ARRANGEMENT PLAN & SECTIONS
CONNECTICUT SITING COUNCIL
BROOKFIELD, CT

BY	MC	CHKD	REM	APP	REM	APP PSM
DATE	6/88	DATE	7/88	DATE	7/88	DATE 7/88
H-SCALE	AS NOTED	SIZE	D	FIELD BOOK & PAGES		
V-SCALE	AS NOTED	V.S.		R.E. DWG		
R.E. PROJ. NUMBER				DWG NO.		11804-92001

ATTACHMENT B

File Location: G:\GISPrj\8951504\Output\Maps\MXD\ReportMaps\StonyHillSub\StonyHillSub_SitingCouncil_20150201.mxd
Date Saved: 4/27/2016 7:59:02 AM

EXISTING GRAVEL ACCESS ROAD
PROPOSED 74' X 35' SYNCHRONOUS CONDENSER
LIMIT OF WORK IS NOT WITHIN WETLAND
20' ACCESS GATE
LIMIT OF WORK IS NOT WITHIN STONY HILL RD
PROPOSED GRAVEL ACCESS ROAD
Stony Hill Road
Stony Farm Lane
Deer Tail Drive
IL-80
R-80
R-40
W6
W7
121
109
110
102
108
105
107
106
104
111
112
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114
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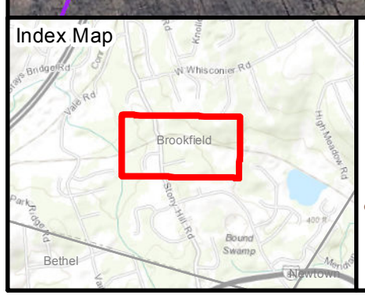
119
120
100
101

Index Map



Legend

- Substation Expansion Limit of Work
- Substation Expansion
- Existing Fenceline
- Proposed Fenceline
- Proposed Ground Apron
- Exising Stonewall to be Removed
- Field Delineated Wetland Line
- Field Delineated Wetlands
- Proposed Gravel Access Road
- Railroad
- Eversource Property
- Town Boundaries
- Parcel Boundary
- Existing Gravel Access Road
- Access Gate
- R-80 Zoning Code Label

N

1 inch = 200 feet

0 200 400

Feet

Source:
-CT DEEP
Basemap, Environmental Data,
Aerial & Topo Imagery
-BSC Group
Field Delineated Data

STONY HILL SUBSTATION SYNCHRONOUS CONDENSER

Aerial Map

Brookfield, CT
Page 1 of 1

EVERSOURCE

BSC GROUP

THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE

Stony Hill Substation Synchronous Condenser
Line List Information

Line List	Owner Name	Site Address	Town	State
100	RAYMOND ESTATES ASSOCIATION C/O MCCARTHY	9A DEER TRAIL DR	BROOKFIELD	CT
101	TOWN OF BROOKFIELD TOWN HALL COMPLEX	100 POCONO RD	BROOKFIELD	CT
102	MAYBROOK RAILROAD COMPANY	1 FEDERAL RD (REAR)	BROOKFIELD	CT
120	ESTATE OF GARY R & LINDA L CULHANE	9 DEER TRAIL DR	BROOKFIELD	CT

**Above information references Proposed Substation Expansion Map Page 1 of 1*

ATTACHMENT C

AFFIDAVIT OF SERVICE OF NOTICE

STATE OF CONNECTICUT)
) ss. Berlin
COUNTY OF HARTFORD)

Sec. 16-50j-40 of the Regulations of Connecticut State Agencies ("RCSA") provides that proof of notice to the affected municipalities, property owners and abutters shall be submitted with a petition for declaratory ruling to the Connecticut Siting Council ("Council"). In accordance with that RCSA section, I hereby certify that I caused notice of proposed modifications of The Connecticut Light and Power Company doing business as Eversource Energy to be served by mail or courier upon the following municipal official:

First Selectman Stephen Dunn
Town of Brookfield
100 Pocono Road
Brookfield, CT 06804

I also certify that I provided notice of the proposed modifications to be served by mail or courier upon four owners of abutting properties shown on the map in Attachment B to the Petition, and additional notice was also provided to property owners located across the street from the substation. .

Anuj Mathur
Project Manager

On this the 2nd day of May, 2016, before me, the undersigned representative, personally appeared, Anuj Mathur, known to me (or satisfactorily proven) to be the person whose name is subscribed to the foregoing instrument and acknowledged that he executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

Gina M. Leo

Notary Public
My Commission expires:

GINA M. LEO
NOTARY PUBLIC
MY COMMISSION EXPIRES FEB. 28, 2021

EVERSOURCE ENERGY

P.O. Box 270
Hartford, CT 06141-0270

April 28, 2016

Dear Neighbor,

As part of its ongoing commitment to deliver reliable energy and superior service to its customers, Eversource Energy ("Eversource") is submitting a petition to the Connecticut Siting Council ("CSC") to perform upgrades at the Stony Hill Substation located at 49 Stony Hill Road in Brookfield, CT.

The upgrades, called the Stony Hill Substation Project ("Project"), are required to bring the electric supply system serving the towns in southwestern Connecticut into compliance with national and regional reliability standards.

The proposed Project includes installation of a synchronous condenser at the Substation and permanent expansion of the fence line by approximately 200 feet by 200 feet to the east of the Substation on existing Eversource property. A synchronous condenser regulates the system's voltage during power changes and/or disturbances on the transmission lines. The synchronous condenser is proposed to be housed in an enclosure on the expanded portion of the Substation site. A new access road will also be installed south of the Substation on Eversource property.

If the CSC approves the proposed Project, work at the Stony Hill Substation is planned to begin in early 2017. Completion of the Project and restoration is planned for late-2018.

For more information about this Project, please call the Eversource Transmission Information Line at 1-800-793-2202, or send an email to TransmissionInfo@eversource.com.

If you would like to send comments regarding Eversource's petition to the CSC, please send them via e-mail to siting.council@ct.gov or a letter to the following address:

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

Thank you.

Sincerely,

David L. Coleman
Lead Project Manager – Transmission Projects