

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

KCE CT 11, LLC PETITION FOR A	:	PETITION NO. 1637
DECLARATORY RULING FOR THE PROPOSED	:	
CONSTRUCTION, MAINTENANCE AND	:	
OPERATION OF A 4.99-MEGAWATT AC	:	
BATTERY ENERGY STORAGE FACILITY	:	
AND ASSOCIATED EQUIPMENT LOCATED	:	
AT 100 SALMON BROOK STREET, GRANBY,	:	
CONNECTICUT, AND ASSOCIATED	:	
ELECTRICAL INTERCONNECTION	:	November 12, 2024

APPLICANT’S PREHEARING SUBMISSION

In accordance with § 16-50j-22a of the Regulations of Connecticut State Agencies, the Town of Granby (“Town”) respectfully files this Prehearing Submission concerning the above-captioned Petition filed by KCE CT 11, LLC (“KCE”) pending before the Connecticut Siting Council (“Council”).

A. Witness List

1. Mark Fiorentino, First Selectman;
2. Kate Bednaz, Town of Granby’s Wetlands Agent
3. Mark A. Gottlieb, LEP, Senior Environmental Consultant for GeoQuest, Inc.; and
4. John Oates, MS, EFO.

B. Exhibit List

1. Prefiled Testimony of Mark Fiorentino, which is appended hereto as Attachment A;
2. Prefiled Testimony of Kate Bednaz, which is appended hereto as Attachment B;
3. Prefiled Testimony of Mark A Gottlieb, which is appended hereto as Attachment C;

4. Prefiled Testimony and resume of John Oates, which is appended hereto as Attachment D;

The Town reserves the right to offer additional exhibits, as necessary, including for purposes of rebuttal.

C. Items to be Noticed Administratively

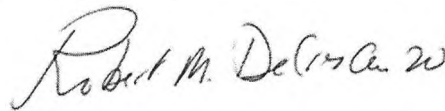
The Town does not wish to notice any items administratively at this time.

D. Direct Testimony

At the hearing, the Town intends to adopt the aforementioned exhibits as its direct testimony and thereafter make its representatives available for cross-examination and re-direct examination. The Town respectfully reserves the right to offer additional exhibits, witnesses, testimony and administratively noticed materials as may be necessary during the course of the proceedings, including for purposes of rebuttal.

Respectfully submitted by,

TOWN OF GRANBY,



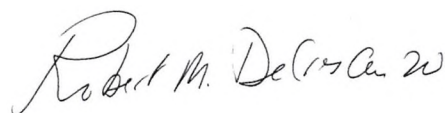
By: _____

ROBERT M. DECRESCENZO, ESQ.
UPDIKE, KELLY & SPELLACY, P.C.
225 Asylum Street, 20th Floor
Hartford, CT 06103
(860) 548-2625
Email: BDecrescenzo@uks.com

CERTIFICATION OF SERVICE

This is to certify that on this day that the forgoing was delivered by electronic mail in accordance with RCSA §16-50j-12, to service list for Petition No. 1637, all parties and intervenors of record as follows:

Lee D. Hoffman Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 lhoffman@pullcom.com	Paul Williamson Sr. Manager, Development Key Capture Energy 25 Monroe Street Suite 300 Albany, NY 12210 paul.williamson@keycaptureenergy.com
Susan K. Okie Horses and Hounds, LLC 15 Mill Pond Drive Granby, CT 06035 sue@horsesandhounds.com	James C. Larwood 8 Roberts Road Simsbury, CT 06070 Jlproperty5@gmail.com
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ATTACHMENT A
MARK FIORENTINO
PREFILED TESTIMONY

(See attached)

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

KCE CT 11, LLC PETITION FOR A	:	PETITION NO. 1637
DECLARATORY RULING FOR THE	:	
PROPOSED CONSTRUCTION,	:	
MAINTENANCE AND OPERATION OF	:	
A 4.99-MEGAWATT AC BATTERY	:	
ENERGY STORAGE SYSTEM AT	:	
100 SALMON BROOK STREET,	:	
GRANBY, CONNECTICUT	:	November 12, 2024

PREFILED TESTIMONY OF FIRST SELECTMAN MARK H. FIORENTINO

My name is Mark Fiorentino and I am the First Selectman in Granby, Connecticut. I submit this prefiled testimony on behalf of the Town of Granby.

We understand and respect the Connecticut Siting Council's role in implementing the State's energy policy. We know it is a difficult task carrying out that policy, while at the same time, ensuring that projects do not have an undue impact in the communities where they are proposed. We understand what you are up against, but frankly, we think this should be a relatively easy decision.

The site proposed by KCE in this case involves significant risks to the public health, safety and welfare of Granby and its citizens. Given the characteristics of the site, these risks cannot be adequately mitigated. A different site should be selected.

I have included an aerial map of the site location, which depicts the site and surrounding properties. This aerial map is appended hereto as Exhibit A. This attachment illustrates, better than I can describe with just words, our primary concerns.

These concerns are:

1. Impact on Wetlands and Watercourses.
2. Impact on the Aquifer Protection Zone.
3. Health and safety risks, particularly in the case of an emergency, and especially in the event of thermal runaway.

As Exhibit A reflects:

1. The site is entirely wooded, and will remain partially wooded after construction.
2. The site contains significant wetlands.
3. The site is entirely within the Aquifer Protection Zone. I have included an aerial reflecting the location of the subject property within the Aquifer Protection Zone. That aerial is appended hereto as Exhibit B. I have also attached correspondence from the Department of Energy and Environmental Protection approving the location of the Aquifer Protection Zone and a Town memorandum regarding the requirements for approvals of uses or activities within that zone. These documents are appended hereto as Exhibit C and Exhibit D, respectively. Suffice it to say that Granby has taken significant steps to protect its aquifers.
4. There is no direct access to Salmon Brook Street. All access is through a heavily-used shopping center. All traffic must enter and exit the site through existing commercial driveways and parking areas.
5. There are a significant number of residential and other uses within close proximity to the site. These uses will be difficult to evacuate and protect in the case of an emergency, particularly a thermal runaway event.

The bottom line is this: while we recognize that battery technology is changing, these projects still involve risk of emergencies like thermal runaway. Accordingly, the storage facilities should be located on sites with substantial buffers, good roadway access, and little or no potential impacts on wetlands and aquifers. The proposed site meets none of these criteria, and it should be rejected.



Mark H. Fiorentino, First Selectmen

11/11/24

DATE

EXHIBIT A

(Surrounding Uses Aerial)

Exhibit A

Distances to property lines

Chatsworth Village
+/- 1,800 ft

Hunt Glen
+/- 1,000 ft

Vet
+/- 1,180

Retail
+/- 540 ft

Greenway Village
+/- 350 ft

Retail
+/- 310 ft
Car Wash
+/- 330 ft

Gym
+/- 300 ft

Landscaper
Office
+/- 325 ft

Residential
+/- 50 ft

100 Salmon
Brook Street

Laundromat
Urgent Care
Restaurant
Salon
0 ft
Physical Therapy
0 ft

YMCA
+/- 300

The Grand
+/- 470 ft

Office
0 ft

EXIHIBT B

(Aquifer Protection Zone Aerial)

Exhibit B

Aquifer Protection Overlay Zone



EXHIBIT C

(DEEP December 13, 1990 Letter)



STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION



December 13, 1990

Francis Armentano
Dir. of Community Development
Town of Granby
15 N. Granby Road
Granby, CT 06035

Dear Mr. Armentano:

Re: Proposed Aquifer Protection Zone Regulation

Thank you for sending the above regulation for our review. In general the regulation is well done and is a major improvement in protecting important public supply aquifers in Town. I do have a few comments for your consideration. I have attached a marked up copy of the regulations with comments written in. Below major comments are discussed:

1. Aquifer Overlay Zone Map

Generally the map cooresponds with the information we have indicating major stratified drift aquifers in town. I assume that you used the mapping we provided and made other overlay maps we recommended. Areas that you want to re-examine or clarify are: east of Route 10 near Manitook Lake; the area of Granby Center and to the east; bedrock/till areas along the west boundary. Also in section 8.21.2 and the definitions you may want to clarify that the zone includes the aquifer and its direct recharge areas.

2. Underground Heating Fuel Storage

As indicated in our phone discussion ideally all underground fuel storage should be prohibited. Reasonable alternatives do exist, such as above ground tanks, but may be difficult in specific circumstances. If it is felt that "heating oil for on-site heating purposes" should be excluded then standards should be required, especially for small commercial ones (2100 gal.) and residential ones (any size) which are not covered under state regulations (see attached information). At a minimum it is desirable to have them meet the standards of the state regulations Section 22a-449(d)-1, Control of the Non-Residential Underground Storage and Handling of Oil and Petroleum Liquids.

3. Performance and Design Standards Section 8.21.7.1

- Stormwater: would prefer prohibition of leaching structures from developed areas, but if you do allow them careful design and standards should be examined.
- building floor drains: if holding tanks are allowed insure the standards are indicated.

Phone:

165 Capitol Avenue • Hartford, Connecticut 06106

An Equal Opportunity Employer

4. Protection of private individual well areas

80% of the towns population depend upon groundwater from individual wells. You should examine your zoning regulations to insure consideration is given to these areas outside the A.P.Z. Specifically you would want to make sure high risk uses are adequately controlled through a special permit or conditional performance standards similar to the A.P.Z. ones.

If you have any questions or wish to discuss these comments further please don't hesitate to contact me at 566-7049.

Sincerely,

2211



Robert Hust
Senior Environmental Analyst
DEP/Bureau of Water Management

EXHIBIT D
(Town Memorandum)

#4

TOWN OF GRANBY

To: Planning and Zoning Commission

From: Francis G. Armentano, Director of Community Development

Date: October 9, 2003

Subject: An application seeking a Zoning Amendment to Section 8.21.9.5 Aquifer Protection Overlay Zone. File Z-18-03.

The Aquifer Protection Overlay Zone contains two areas, the actual Aquifer, where stratified drift deposits have been identified that can or do contain high volumes of ground water and the Recharge Area that encompasses the drainage basin that flows towards the Aquifer.

The Aquifer Protection Overlay Zone regulation requires a Special Permit for all new developments within the Overlay Zone, where the applicant must demonstrate the use of Best Management Practices in the design and operation of the proposal. BMPs are required to minimize or eliminate the threat to the aquifer. The regulations establish specific criteria, in addition to the criteria outlined in Section 8.2, to be applied by the Commission when considering uses within the Aquifer Protection Overlay Zone.

Very few uses are actually prohibited within the Aquifer Protection Overlay Zone. Prohibited uses are outlined under Section 8.21.9. The proposed amendment would change the status of **“automotive service stations or similar use which involves truck, boat or automobile engine or body repairs”** from prohibited, to allowed by Special Permit, if such use is located within the recharge area, but not the actual stratified drift aquifer.

Presently, the regulation makes only one distinction between the Aquifer and the Recharge Area. This is in Section 8.21.4.6, which permits the installation of “underground storage tanks for gasoline for non- residential purposes, when such tanks are confined to the Recharge Area of the Overlay Zone.”

The Town’s Aquifer Protection Overlay Zone differs from a level A or B mapped area of a wellhead in that the wellhead area actually serves as a public water supply. The Aquifer Protection Overlay Zone seeks to preserve the quality of the ground water so that it can be available for future use. In Granby we have level B mapping for the Salmon Brook Water District well, where a greater degree of concern is applied to proposed developments. The comment from CRCOG references “public supply watershed areas”, which differs from Granby’s Aquifer Protection area.

Interesting, the area where the applicant would like to propose a future use provides the recharge to a portion of the stratified drift aquifer that was not included in the Town’s Aquifer Map as adopted by the Commission. This stratified drift area exists in the industrial areas east of Salmon Brook Street, including the area of State Line Oil.

An approval of this application will not permit the development of the use but will only provide for the application of a Special Permit/Site Plan for such use. Upon application the Commission can deny or approve the application based on the criteria established for determining compliance with Best Management Practices and Special Permit Uses. However it would make little sense and be a waste of time and money if this amendment was approved without some belief that the actual use might be approved. Therefore, if Commission members believe that they would never support such a use within the recharge area of the overlay zone, a denial is preferable to an approval of this amendment.

I believe that the Commission could rule either way in regards to this application and be in full compliance with the guiding documents of the Plan of Conservation and Development, State Statute and the purposes of the Zoning Regulations. The member's decision will no doubt be based on whether or not they feel such use can or cannot be developed in a manner that will limit the risk to the ground water. It is up to the applicant to demonstrate that such a use could be established without presenting an undue risk to the area.

ATTACHMENT B

KATE BEDNAZ

PREFILED TESTIMONY

(See attached)



November 8, 2024

Attn: Robert DeCrescenzo, Esq. c/o Town of Granby
Updike, Kelly & Spellacy, P.C.
225 Asylum Street 20th Floor
Hartford, CT 06103

**Re: CSC PETITION NO. 1637 – 100 Salmon Brook Street, Granby, CT
Granby Inland Wetlands & Watercourses Expert Review
AC Battery Energy Storage Facility - CT11 BESS – KCE CT 11, LLC**

Dear Mr. DeCrescenzo:

Freshwater Wetland Services (FWS) is pleased to submit this report per your request on behalf of the Town of Granby, CT to review the above-mentioned development proposal, CSC Petition No. 1637 as it relates to wetland resource areas associated with, and immediately adjacent to the property referenced as Map H-53, Block 78, Lot 26, totaling 4.85 acres in size, herein referred to as the subject property.

The forested subject property is located immediately south of the Mill Pond Drive commercial development, east of Salmon Brook Street, north and east of the Monrovia agricultural field system which contains the adjacent impoundment by a dam, locally identified as Sumatra Pond. Approximately 1,500 feet downstream of the dam is the watercourses confluence with Salmon Brook, and less than 2 miles downstream is the confluence with the Farmington River, both watercourses federally designated Wild and Scenic Rivers.

The Wild and Scenic designation, elevates the level of ecological protection warranted to the Salmon Brook, its tributaries, and adjacent lands that influence the river. Granby has been protecting the watercourse for decades, if not centuries by preserving thousands of acres of land that influence Granby's vibrant, healthy and diversified ecosystems and watercourses.

FWS review is based on the proposed projects compliance with the local wetlands and watercourses regulatory requirements and sound ecological development practices as it relates to the subject property. FWS has reviewed the documents available on the CSC website (https://portal.ct.gov/csc/3_petitions/petition-nos-1601-1700/pe1637) as of the date of this letter as they pertain to regulated wetland resource areas and the proposed development on the subject property. My review comments and questions are as follows.

1. It is noted on the NRCS Soil Survey that Merrimac fine sandy loam is located throughout the elevated portion of the site, where the project infrastructure is proposed. These soils are mapped as prime farmland soils in the State of Connecticut. Has limited hardscaping to potentially preserve soils if the site is decommissioned been considered, and if not why?
2. The Granby Inland Wetlands and Watercourses Commission (GIWWC) has contacted myself and other town staff to request access to the subject property, to conduct a site visit to review the wetland resource areas as it relates to the proposed project design element locations and existing

environmental features. In addition, myself as their expert requests access for inspection of site conditions.

3. Has an effort been made by the applicant to delineate/depict the boundary of wetlands located on the adjacent property? It appears that wetlands may be located only feet from the property and no mention of the estimation or presence of the wetland location was made in any submitted documentation. It is clearly notable from aerial photography that a wetland is located at a minimum, at the base of the slope immediately surrounding and adjacent to the subject property. Topography indicates that the wetland may extend onto or be very close to the property line, especially on the easterly side.
 - a. The application depicts the 50- and 100-foot buffer of the inland wetland boundary on the "Site Plans", dated July 22, 2024. It is recommended that the abutting wetlands and watercourse be delineated so that the extent of the buffer zone that extends onto the subject property will be accurately depicted. This will also confirm that no other wetlands exist on the subject property. If the adjacent owner will not consent to providing access for the delineation, at a minimum an ocular and aerial estimated boundary can be projected onto the "Site Plans" by the projects soil scientist.
 - i. Has the swale located in the northeasterly property corner been evaluated for wetland soil conditions and if so has corresponding documentation been submitted? If not, why. If so, it is requested that the applicant submit the documentation for review.
 - b. The Granby IWWC regulates an Upland Review Area (URA) that extends 100-feet from wetlands and 200-feet from watercourses. This is an area that has been deemed important for review and protection of the functions and values that wetland resource areas provide. It is recommended that the applicant show these review areas as part of the permitting plans.
4. The applicant proposes clearing 1,500 sf of wetland vegetation and additional buffer zone vegetation. Mitigation measures presented includes leaving low grown shrub species and only clearing trees necessary to install the utility line. Very little detail is presented to detail the work proposed within this sensitive resource area.
 - a. Locally, when there is a direct, significant impact to a wetland or watercourse, we have the right to ask the applicant for alternatives for this impact.
 - i. Considering the direct wetland and watercourse impact and plethora of pavement to the north, why are impacts not proposed through a parking area instead of through a wetland and a watercourse?
 - ii. Have project layout alternatives been presented and evaluated for the necessity of wetland and buffer/riparian area impacts?
 - iii. Can the utility line be connected as required by traversing already disturbed areas? An alternative for utilizing the existing utility easement is paramount in permitting direct impacts to wetland resource areas.
 - b. What will be done to restore and protect the watercourse during and after construction?
 - i. It is recommended that a detailed wetland and watercourse mitigation plan for this direct impact be included in the Petition filing. This plan is recommended to address the multiple outstanding items in the filing as it relates to the direct impact and restoration of a wetland and watercourse. The following are some recommendations/observations regarding this location.
 1. How will the direct impacts to the wetlands be conducted in terms of sequencing and stabilization?
 2. How will soil/substrate within the wetland/watercourse be stabilized?



3. How will the area be revegetated?
 4. If there is organic soil in the wetland area to be disturbed? Will it be preserved and later reused to restore the wetland soil profile? If not, what will be the criteria for wetland and watercourse mitigation substrate/soil.
 5. Will invasive species be controlled within the cleared area?
 6. How will the water/flow be managed during and post construction?
 7. What time of year will the work be completed and are there any restrictions?
 8. How will hydrology be managed during and post construction, including but not limited to dewatering, and restoration of the stream bed and banks?
 9. What will be the width and depth of trench traversing the wetland and watercourse?
 10. Where will material and soil stockpiles be located?
 11. How long will the area be monitored for success post construction?
 12. What will be considered success?
 13. The "Erosion & Sediment Control Plan" dated July 22, 2024 does not show any erosion controls perpendicular to the watercourse. It is my understanding that the area will be excavated for the utility east to west. This provides no protection to the wetland or watercourse construction.
5. Section 3.4.1 of the CSC Petition Narrative contains the Wildlife Habitat discussion. The submission only references the vegetative community and physical features without reference to habitat suitability, utilization, and preservation.
- a. The application states that the USFWS information for Planning and Conservation system, which identified the endangered Northern Long-eared Bat (*Myotis septentrionalis*), and monarch butterfly (*Danaus Plexippus*) may potentially occur in the project area. It is recommended that the applicant consider incorporating mitigation measures for enhancing habitat for these endangered species through their mitigation design which is recommended to be presented in greater detail.
6. As previously mentioned, downstream of the subject site is the Salmon Brook and Farmington River, which are designated and federally protected under the Wild and Scenic Rivers Act, this is the same designation as rivers within national parks throughout the United States. Therefore, installing additional controls to protect these resources is paramount in maintaining such an outstanding resource.
- a. If a contained fluid was to spill and reach the nearby slope it has a significant potential to reach the adjacent wetland and watercourse. This watercourse flows east, off the subject property, to Sumatra Pond which is contained by a small earthen dam. The watercourse then continues east to the Salmon Brook, eventually continuing to the Farmington River, all exemplary riverine systems.
 - i. Has the applicant considered additional contouring of the site to prevent fluids from entering the downgradient wetlands and watercourse in the case of a spill?
 1. Have the soils been analyzed to demonstrate the anticipated percolation rate, depth for the fluid materials to be stored to demonstrate a reasonably likely upland containment area during a total failure of the fluid containment system?
 - ii. Has the applicant contacted the owner of the Sumatra Pond dam to explore options for containment utilizing hydrologic dam controls to prevent the migration of spill materials past Sumatra Pond, to the Salmon Brook? It is recommended that this



option be explored, and if viable, included as a provision in their Operations and Management/Emergency Response Plan to contact the dam owners to stop flows to the maximum extent practicable, isolating contamination, and therefore preventing impacts to exemplary Wild and Scenic Rivers. It should be noted that it is understood that the owner of the dam intends on permitting a proposed project for a solar field that will require the review of the CSC. Applicants/owners may be able to work symbiotically towards their projects goals.

7. The Petition application does not include data on materials used for stabilization and mitigation.
 - a. It is unclear what substrates will be utilized within the project area. Will it be vegetated, concrete, curbs, gravel, etc.? Therefore, a full analysis of impacts cannot be determined as the Petition is submitted.
 - b. What materials will be used to stabilize earthen areas of the site? This shall include detailed seed mix specifications and locations, and locations and species of vegetative plantings.
 - i. How will these species benefit from the ecology of the site and abutting properties?
 - c. What are the habitat considerations for the proposed project area as it relates to final stabilization?
8. The proposed project is designed to clear vegetation to the edge of, if not down the existing slopes that lead to the wetland and watercourse, some of which is undefined. As with any watercourse riparian buffer, maintaining a healthy woody vegetated slope is a key to preventing bank/slope erosion of these meandering watercourses. Especially considering the recent extreme precipitation events that have occurred and are predicted to continue, causing erosion as never seen before.

Not having knowledge of the location of the bank of the adjacent watercourse immediately south and east of the property, and not having accessed the site, it is difficult to evaluate the proximity of the banks of the watercourse and existing vegetation community.

- a. Are there any existing trees or shrubs that can be preserved in areas without site equipment/access?
 - b. Have alternatives for the proposed layout been presented that would potentially reduce impacts to the wetland and riparian buffers and sensitive slopes?
 - c. How will the staging area be utilized/restored post construction? Can this area be utilized for habitat enhancement plantings?
 - d. Why is the area to the northeast of the staging area being cleared? I see no proposed improvements in this location.
9. The adjacent wetland resource area functions and values are supported by diverse wildlife that can be sensitive to light when conducting life maintaining activities such as hunting, resting, finding cover from predators, etc.. To preserve the existing habitat, it is important to consider the necessity, intensity, and location of lighting sources to minimize any direct impacts.
 - a. Is there a lighting plan for this proposed project?
 - i. What are the locations and type of lights to be installed at this facility?
 - ii. What will be the hours of illumination?
 - iii. Will they be dark sky compliant?



10. What mitigation measures would be provided as part of a catastrophic event caused by the facility, that caused damage to vegetation in the buffer or resource areas? Would this be left to the Town to contend with, or is this something that can be included in the "Operations and Management/Emergency Response Plan" as an item that is required to be addressed by the owner/controller of the subject site at the time of the event?
11. The perimeter erosion controls are shown to be only silt fence, to be located at the top, or middle of the slope that leads directly to the wetland resource areas. It is my experience that there is significant potential for silt fence to be brought down by construction activities, especially on a tight site as equipment maneuvers about. Considering the proposed project activities to the top of a slope that leads directly to wetland resource areas, a double erosion control barrier is highly recommended. This may be a combination of silt fence and straw bales, erosion control log, or wood chip berm.
12. How will invasive species be managed?

CONCLUSION

I have reviewed the available information, and it is my opinion that the CSC lacks the details needed to make an informed decision as it relates to the preservation of wetlands and watercourses. This includes key information like the location of all wetland resource areas adjacent to the subject property; construction details; presentations of alternatives to eliminate direct wetland and watercourse impacts; vegetative removal and re-establishment details; direct resource area disturbance details; and details needed to adequately assess the site impacts as it relates to adjacent wetland resource areas.

Furthermore, I feel it is prudent that alternatives be evaluated that do not require direct impacts to wetland resource areas be explored in full. Especially an alternative for utilizing the existing paved utility easement for project interconnection utilities, which if a viable alternative, would require no direct impact to wetland resource areas as currently presented. It seems completely viable that a site utility would be located within the designated and planned utility easement.

As always, please feel free to contact me at 413-695-2195 or at freshwaterwetland@gmail.com with any comments or questions. I look forward to following the progression of this application as the applicant provides adequate information and details to review the entirety of the proposed project.

Sincerely,



KATE BEDNAZ, PWS #1906
FRESHWATER WETLAND SERVICES
Registered Soil Scientist | President



ATTACHMENT C
MARK A GOTTLIEB
PREFILED TESTIMONY

(See attached)

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

KCE CT 11, LLC PETITION FOR A)
DECLARATORY RULING, PURSUANT TO)
CONNECTICUT GENERAL STATUTES §4-176)
AND §16-50K, FOR THE PROPOSED)
CONSTRUCTION, MAINTENANCE AND)
OPERATION OF A 4.99-MEGAWATT AC)
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AND ASSOCIATED EQUIPMENT LOCATED)
AT 100 SALMON BROOK STREET, GRANBY,)
CONNECTICUT, AND ASSOCIATED)
ELECTRICAL INTERCONNECTION)

PETITION NO. 1637

NOVEMBER 11, 2024

PRE-FILED TESTIMONY OF MARK A. GOTTLIEB

My name is Mark A. Gottlieb, LEP, and I have dedicated my career to the field of environmental consulting and geology. I have been a Senior Environmental Consultant for GeoQuest, Inc. (“GeoQuest”) in Bloomfield, Connecticut, for the past two years. Before this, I led Catalyst Environmental Consulting, Inc. (“Catalyst”) in Simsbury, Connecticut, as President from 1994 to 2021. Catalyst was a niche consulting firm specializing in environmental site assessments, remediation, and consultation services for various sectors, including financial, insurance, and real estate. My experience at Catalyst also involved regulatory consulting, third-party project reviews, and providing expert witness services until the firm was acquired by GeoQuest in August 2021.

I graduated from the University of Hartford with a Bachelor of Arts in Mathematics, complemented by a minor in Chemistry in 1981. Furthering my education, I completed coursework in environmental engineering and geology at the University of Connecticut in 1989.

Throughout my career, I have conducted numerous environmental site assessments across Connecticut, Massachusetts, Rhode Island, and New York. These assessments often involved

detailed subsurface investigations of various environmental contaminants. I've successfully managed remediation projects that included historic mill properties and PCB-contaminated sites, often employing environmental land use restrictions to achieve cost-effective solutions. My professional journey is supported by my membership in the Environmental Professionals Organization of Connecticut, which ensures that I remain at the forefront of industry standards and practices. My Curriculum Vitae is appended hereto as Attachment A.

The purpose of my testimony in this proceeding is to speak about the proposed construction and operation of a 4.99 MW battery energy storage system located at 100 Salmon Brook Street in Granby, Connecticut (the "Proposed Site"). I have reviewed Petition No. 1637 (the "Petition") and related documentation filed by KCE CT 11, LLC d/b/a Key Capture Energy ("KCE"), and the June 2024 Natural Diversity Data Base Areas ("NBDB") map of Granby which is appended hereto as Attachment B.

After my review of the Petition and relevant documents, I am of the opinion that the Proposed Site poses an unacceptable risk to local ground water resources due to its potential for contaminant release during thermal runaway (fire) events which highlights the need for more comprehensive risk assessments and safeguard measures before proceeding.

The Proposed Site is located in an aquifer protection area, which means groundwater is utilized for drinking water purposes or could potentially serve such purposes in the future. An aquifer protection area is regarded as a sensitive receptor. In the event of thermal runaway, various contaminants might be released into the environment. These contaminants could include lithium, fluorine, phosphate, and ethylene glycol, with others potentially identified upon reviewing

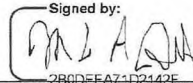
Material Safety Data Sheets (“MSDS”) for all storage unit and fire suppression system components.

Should a thermal runaway occur, contamination is anticipated to migrate along three routes: A) surface runoff into adjacent wetland areas and water courses; B) infiltration into the subsurface and the aquifer below; and C) airborne transport of contaminants, regardless of rainfall conditions. Among the potential contaminants, lithium is particularly significant. Connecticut has established a drinking water limit of 40 µg/l (40 parts per billion). The U.S. EPA’s standards for other known potential contaminants are as follows: Fluoride at 4.0 mg/l (parts per million), Ethylene Glycol at 7 mg/l (parts per million), and Phosphate at 0.10 mg/l (100 parts per billion).

The high solubility of many constituents expected to be released during thermal runaway increases the risk of impacting the aquifer below. Once contaminants enter the aquifer, the plume will spread downgradient in line with the groundwater flow. Currently, the presence of drinking water or irrigation wells in the vicinity remains unknown because no receptor study is available for review. Although the Town of Granby’s Aquifer Protection Regulations, which date back to the early 1990s, do not specifically prohibit the proposed usage, the current plan poses an unreasonable risk to the aquifer in the event of thermal runaway.

While the site itself is not listed on the CTDEEP Natural Biodiversity Database, numerous mapped sites are nearby. Many of these sites are located downgradient to the site concerning groundwater flow and prevailing wind directions. Further investigation regarding the potential impact on these NBDB sites is crucial.

Additional documentation needed for a comprehensive risk evaluation includes: 1) MSDS for the battery storage units and contents; 2) MSDS for firefighting chemicals anticipated for use during thermal runaway or incorporated within fire suppression systems; 3) volume and mass data for each constituent listed on the aforementioned MSDS; 4) a receptor study assessing: A) drinking water and irrigation wells within 1000 feet of the site; B) wetlands and water courses within 1000 feet of the site; C) identification of potential receptors exposed to airborne contaminants during a thermal runaway; and D) NBDB sites within 1000 feet; and 5) a Phase I ESA for the site.

Signed by:


2B0DEEA71D2142F...
Mark A. Gottlieb, LEP

ATTACHMENT A
CURRICULUM VITAE

(See attached)

EDUCATION

University of Hartford, B.A., Mathematics with chemistry minor, 1981

University of Connecticut, coursework in environmental engineering and geology, 1989

Western Kentucky University, graduate coursework in Geology, Hydrology and Hydrogeology with specialization in environmental issues in karst terrains, 1989-1992

EMPLOYMENT

2021 - 2023: Senior Environmental Consultant, GeoQuest, Inc., Blomfield, CT.

1994 - 2021: President, Catalyst Environmental Consulting, Inc., Simsbury, CT. Catalyst was a small specialty service consulting firm providing environmental site assessments, remediation, consulting and related services for the financial, insurance and real estate communities. Catalyst also provided regulatory consultation, third party review of environmental projects and documents, and expert witness services. Catalyst was sold to GeoQuest, Inc. of Bloomfield, Connecticut in August of 2021.

1993-1994: Vice President, IES of Connecticut, Inc., Hartford, CT. Responsible for all phases of the operation for this medium sized environmental consulting firm, including technical direction, personnel, health and safety, and customer services.

1993-1995: Adjunct faculty, Chemistry Department, University of Hartford, Hartford, CT. Taught introductory chemistry and graduate level environmental organic chemistry.

PROFESSIONAL EXPERIENCE

Conducted Environmental Site Assessments in Connecticut, Massachusetts, Rhode Island, and New York, including subsurface investigations involving petroleum hydrocarbons, volatile and semi-volatile organic compounds, light and dense non-aqueous phase liquids, metals, pesticides, and polychlorinated biphenyls (PCBs). Actively involved in the completion of over two thousand Environmental Site Assessments.

Project manager for over one hundred remediation projects in Connecticut from 1994 to 2021, including 19th and 20th century mill properties, gas stations, former agricultural lands, large-scale leaking USTs, and PCB contaminated soils. Several of these projects have involved the use of Environmental Land Use Restrictions (ELURs) resulting in significant cost savings for the client.

Connecticut Licensed Environmental Professional of record on over twenty sites subject to the Transfer Act under Conn. Gen. Stat. §22a-134, or Voluntary Remediation under Conn. Gen. Stat. §22a-133x and 22a-133y. Has rendered over eleven unaudited verifications to date.




ATTACHMENT B
NATURAL DIVERSITY DATA BASE AREAS
JUNE 2024

(See attached)

Natural Diversity Data Base Areas

GRANBY, CT

June 2024

-  State and Federal Listed Species
-  Critical Habitat
-  Town Boundary

NOTE: This map shows known locations of State and Federal Listed Species and Critical Habitats. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a variety of data sources. Exact locations of species have been buffered to produce the generalized locations.

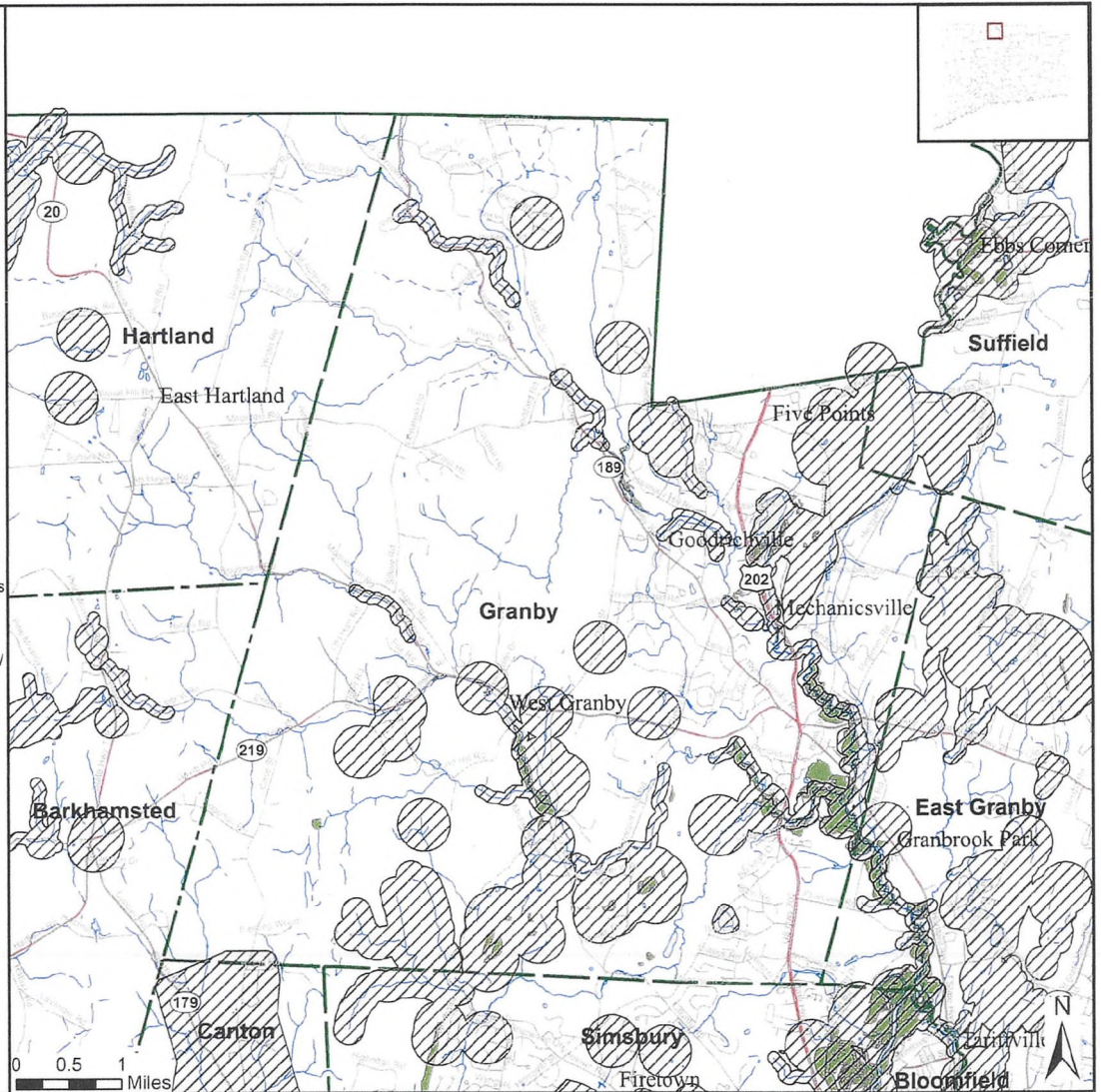
This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a hatched area there may be a potential conflict with a listed species. For more information, use DEEP ezFile <https://filings.deep.ct.gov/DEEPPortal/> to submit a Request for Natural Diversity Data Base State Listed Species Review or Site Assessment. More detailed instructions are provided along with the request form on our website. <https://portal.ct.gov/deep-nddbrequest>

Use the CTECO Interactive Map Viewers at <http://cteco.uconn.edu> to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St, Hartford, CT 06106
email: deep.nddbrequest@ct.gov
Phone: (860) 424-3011



Connecticut
Department of Energy &
Environmental Protection



AQUIFER PROTECTION AREA

The site is located in an Aquifer Protection Area, meaning groundwater is used for drinking water purposes and/or potentially used for drinking water purposes in the future. An Aquifer Protection Area is considered to be a Sensitive Receptor.

In the event of thermal runaway (fire) a variety of contaminants could potentially be released to the environment these include: lithium, fluorine, phosphate and ethylene glycol and possibly others pending review of MSDS (material safety data sheets) for all components of the storage units and fire suppression systems.

In the event of thermal runaway, anything liquid used as a firefighting medium and/or if the event occurs during a period of heavy rainfall, migration of contamination is expected to occur along three pathways:

- A) Surface runoff into nearby wetland areas and water courses;
- B) Downward migration into the subsurface and underlying aquifer;
- C) Wind borne transport of contaminants (regardless of rainfall).

Of the contaminants known to be potentially released, lithium is the most significant. Connecticut has set a drinking water standard of 40ug/l (40 parts per billion).

The USA EPA standards other known potential contaminants are:

- Fluoride: 4.0 mg/l (parts per million)
- Ethylene Glycol: 7 mg/l (parts per million)
- Phosphate: 0.10 mg/l (100 parts per billion)

Many of the constituents expected to be released during a thermal runaway have a high degree of solubility in water, this increases the risk of impacting the underlying aquifer.

Once contamination reaches the aquifer, the contaminant plume will spread in the downgradient direction with respect to ground water flow. The presence or absence of drinking water or irrigation wells in the area is unknown as no Receptor Study has been made available for review.

While the proposed usage of the site is not specifically prohibited under Granby's Aquifer Protection Regulations, which date from the early 1990s (decades prior to the development of the proposed storage units), the current proposal is poses an unacceptable risk to the underlying aquifer in the event of thermal runaway.

CTDEEP NATURAL BIODIVERSITY DATABASE (NBDB)

While the site itself is not listed on the NBDB, however, multiple mapped site are located in close proximity to the site. Many of the these sites are located either downgradient of the site with respect to groundwater flow and prevailing wind directions. A copy of the NBDB map is attached.

Additional investigation of the potential impact to these NBDB sites is necessary

ADDITIONAL DOCUMENTATION NEEDED TO FURTHER EVALUATE RISK

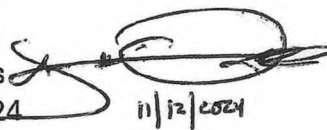
- 1) MSDS (Material Safety Data Sheets) for the battery storage units and contents.
- 2) MSDS for fire fighting chemicals to be used in the event of thermal runaway or contained in any fire suppression systems.
- 3) Volume/Mass of each constituent listed on the above MSDS.
- 4) Receptor Study Evaluating:
 - A) Drinking water and irrigation wells within 500 (or 1000?) feet of the site;
 - B) Wetlands and water courses within 500 (or 1000?) feet of the site;
 - C) Identification of potential receptors subject to wind borne transport of contaminants in the event of thermal runaway.
 - D) NBDB sites within 500 (or 1000?) feet of the site.
- 5) Phase I ESA for the site.

ATTACHMENT D
JOHN OATES
PREFILED TESTIMONY

(See attached)

A review of the impact on public safety from locating Battery Energy Storage System at 100
Salmon Brook Street in the Town of Granby, Connecticut

Prepared by:
John H. Oates
November, 2024



11/12/2024

Introduction

This report is provided in response to an inquiry by the Town of Granby requesting input on the potential community fire and emergency service impact that would be created by locating a Battery Energy Storage System (BESS) project at 100 Salmon Brook Street in the Town of Granby, Connecticut.

A review of the Town's current ability to provide public fire protection, the significant lack of infrastructure, the potential impact on the surrounding residents and businesses, and the increased risk to them confirms that locating this project within the Town of Granby is not in the best interest of the community.

This report contains the following sections:

Community Overview

Technology Overview

Neighborhood Risk

Fire Department

Water Supply

Impact of an emergency

Notification and evacuation

Commentary on the applicant's Emergency Operations Plan and other documentation

Conclusion

Community Overview

The project's proposed site is 100 Salmon Brook Street in the Town of Granby, CT. Granby is a Town within Hartford County and was incorporated in 1768. The Town is wholly responsible for providing emergency services, as there is no County Government or other entity responsible for this.

Fire department services are provided by the Lost Acres Fire Department, Inc., a non-profit corporation chartered in 1941 with the singular purpose of providing fire protection within the borders of the Town of Granby. A subsequent section includes additional details on the form and operation of the fire department.

Municipal water supply in the Town of Granby, for both fire protection and drinking water, is provided by two separate entities. The oldest is the Salmon Brook Water District, which primarily serves the community's commercial center. The second provider is the Aquarian Water Company, which provides water to a small section of the southern portion of the community. The project is located within the Aquarian coverage area. Additional details on the capacity of the water company will be covered in a subsequent section.

The Granby Police Department is responsible for police services in the Town of Granby. Staffed 24/7, the department has 16 sworn personnel and endeavors to staff two patrol officers and one supervisor daily. The evacuation and notification section provides additional details about the police department's capacity.

Technology Overview

The applicant desires to locate a 4.99 Mega Watt BESS at the noted location. The battery technology referenced in the initial application was Sungrow ST 2752UX-US, which uses a Lithium-Ion (LI) battery unit. The application was subsequently updated to modify the technology to use the Canadian Solar E-Storage SolBank 3.0 (capacity of 5MW), which utilizes Lithium Iron Phosphate (LFP) technology. Frequently referenced content indicates that LFP is a 'safer' technology and reduces the risk to the environment and the communities where they are located. This statement is only partially true. The LFP may be safer technically than LI, but that should not be construed as perfectly or completely safe. This technology remains prone to the same type of fire or failure commonly found in LI BESS with similar expected outcomes.

It is imprudent to approve a BESS, or any project, based solely on the relative safety of a particular battery type or chemistry. The industry and technology continue to evolve, with new and different risks found in various battery chemistries. Given the tumultuous nature of this industry, as evidenced by the applicant's choice to change battery chemistry types, the determination of permissibility should be focused on the risks and hazards of current technology as well as the impact that may come from a future change in battery technology. IE, approval only because the applicant chose 'X' battery technology is unwise, as it could change in the future.

There is a belief that LFP battery technology is safer than Lithium-Ion (LIO) technology. However, 'safe' or 'safer' is a judgment that may or may not be based on research or science. Recent research published in the Journal of Energy Storage demonstrated that the outcomes from thermal runaway and other failures of the battery technology remain hazards to the environment and the humans within range.

Neighborhood Risk

The area proposed for the project is immediately abutted by a small mercantile area directly adjoining to the north, agricultural land to the south, a state highway to the west, and undeveloped land that features an vernal pool directly to the east.

Immediately adjacent to the proposed location are apartment complexes, retail and service businesses, a daycare, a small animal hospital, an age-restricted housing complex, and a group home for developmentally disadvantaged persons. All of these locations would likely be impacted by an emergency or failure of the BESS.

As discussed in detail in the notification and evacuation section, it is important to note that the only means of travel in and out of one apartment complex, containing 38 units and an estimated population of 60 persons, is past the street entrance to the BESS. There is no other way for residents of that complex to access their dwelling

The 2020 census data indicates that nearly 25% of the total population of the zip code area (the project location and adjacent area are served by a single zip code) are over the age of 65 (CT DataHaven, 2021). Age is often a factor in evacuation speed and an indicator of medical fragility. As well, 2020 census data indicates that 10% of the population of the community suffers from asthma and coronary heart disease (CT DataHaven, 2021). As such, those conditions would likely be present in the population adjacent to the BESS and potentially exacerbated by any emergency at the facility that may cause an evacuation.

Fire Department

Fire department services for the Town of Granby, including the applicant's address, are provided by the Lost Acres Fire Department. The department was incorporated in 1941 and has a rich tradition of volunteer service to the community. It has a capped membership total of 50 persons and has averaged less than that over the past decade. The department is a fully volunteer organization, resulting in significant variation in the number of persons available and able to respond to calls for service. That also substantially limits the available time for training, staying abreast of new technology, and engaging in the latest challenges facing the fire service.

The correct process to fight a fire at a BESS is the subject of active research among leading fire service entities with subject matter expertise. Those persons and groups have not aligned to provide a statement on preferred practice. However, current proven practice indicates that attempting to extinguish the fire is unsuccessful. Current practices to mitigate the emergency include Isolation of the problem, cooling remaining battery units, and evacuating the area to reduce exposure to the toxins created by the thermal runaway/batter emergency. Therefore, cooling adjacent battery units with hose streams is an often-applied tactic. Depending on the size and scope of the problem, a fire flow of more than 500 gallons of water per minute may be necessary.

Most of the department's response area does not feature fire hydrants supplied by a public water supply. Therefore, the department is most accustomed to water supply operations utilizing water tankers. This mode of operation has dictated the selection of a smaller water supply hose carried on their fire apparatus than what is typically found in departments that operate from fire hydrants. This choice of a smaller water supply hose will reduce the ability to supply enough water, given the expected fire resulting from a BESS failure.

A recent BESS fire in Otay Mesa, California, required over four million gallons of water and several days to fully extinguish (Kucher, 2024). Neither the Town of Granby nor its fire department is equipped to provide that extent of emergency response.

Water Supply

The domestic and fire protection water for the address of the proposed project is provided by Aquarian Water Company. The BESS location is geographically at the end of the water supply line. The line traverses Canton Road and then returns south to supply a short section of Salmon Brook Street and then Mill Pond Drive. The water main supplying Mill Pond Drive (the access point for the BESS) and the water main for the street address of the BESS (Salmon Brook Street) are not interconnected with any other water main. This creates a 'dead end' circumstance where water is only being supplied from one direction. This results in a single point of failure, reducing resiliency and potentially limiting the volume and pressure needed to fight a fire in a BESS. If a failure of the water main occurs on Canton Road, Salmon Brook Street, or the areas of connection into Simsbury until the bi-directional supply occurs, the water supply for the subject property will be lost.

As noted above, the fire department has significant experience supplying water for fire protection using mobile water supply apparatus (tankers). However, the ability to sustain the needed fire flow, in both quantity and duration, far exceeds that ability or even potential.

Impact of an emergency

The impact of a fire at BESS will result in heat, smoke, and products of combustion that are not consistent with a normal and customary fire in a dwelling.

The failure of a battery unit often results in what is termed 'Thermal Runaway'. Thermal Runaway is defined as an exothermic chemical decomposition of the battery cell materials, leading to vast heat generation and temperature rise (Burgryniec et al., 2023). This can result in the generation of gases from the decomposition process that are flammable and toxic and can lead to smoke, hot sparks, and flames jetting from the battery pack(s). Since the batteries are in close proximity to each other, it is possible for the reaction in one battery cell to cause a cascading failure among an entire battery pack (Burgryniec et al., 2023). Because this occurs in an enclosed space, it can build until the space is pressurized to failure, or outside air enters the space, bringing the fuel/air mixture (fuel from the battery off-gassing, air from the outside atmosphere) into the flammable or explosive range (Burgryniec et al., 2023).

Absent ignition, a cloud of toxic gasses will be released. The volume of gasses released is often dependent on the state of charge of the battery units. When the state of charge is higher, an LFP battery may produce less gas volume (Burgryniec et al., 2023). Note, this is less, not zero. However, as the state of charge diminishes, the volume of gas produced is like other battery technologies.

It is important to understand the composition of the gasses emitted by a LFP battery. The most prevalent include Carbon Monoxide (CO), Carbon Dioxide (CO₂), Hydrogen (H), and Methane (CH₄) (Yang, et. al, 2023).

While tactic and methodology disagreement on how to fight a BESS fire is evident within the fire service industry, general agreement exists on the following:

1. Do not enter the space of the battery having the emergency
2. Cool the battery and adjacent batteries to reduce the potential of an expanding incident.
3. Evacuate as needed (see subsequent section)

Water streams from cooling the BESS will likely seep into the ground. Current FEMA-funded research at a Texas university is working to identify the chemical compounds found in the runoff from a stored energy fire. Initial indication from the research indicates that the compounds signal significant toxicity and threat to the environment.

Notification and evacuation

Notification

The applicant's submitted emergency operations plan (EOP) illustrates the need to notify the fire department in the event of an emergency. This direction is consistent with current proven practice.

The ability to inform the public of an emergency at the proposed location is less robust. The Town does not currently utilize a citizen alerting platform (commonly described as reverse 911). The town does utilize an email listserv for non-urgent communication. However, that would not be sufficient in the event of an evolving emergency. A substitute for notification can be provided by the State of Connecticut Department of Emergency Services and Public Protection, Division of Homeland Security. Utilizing that process is cumbersome and time-consuming. This would likely be ineffective as it may only contact persons with landline phone service.

Evacuation

As noted in the previous section, evacuation of affected or potentially affected persons during an emergency event at the BESS location is a prudent and supported measure. Typically, the distance or area to evacuate is dictated by the risk and hazard. Since a failure of the BESS can create a significant volume of smoke and toxic gases, a sizable evacuation area is likely.

The evacuation distance can range from 300 feet (IAFC, 2022) to upwards of 1300 feet (US DOT, 2024). The shorter distance may protect from thermal insult but offers no specific

protection from the impact of the gasses discharged during the event. Recent BESS fires in the United States have resulted in initial evacuation distances that exceed the requirements noted in the reference. Unlike the proposed project, many of those incidents did not occur in areas with a significant residential population. The location of the Mill Pond apartment complex, adjacent apartments located at the Grand apartment complex, and single-family homes across from the project address increase risk.

The shortest recommended distance would encompass Mill Pond Drive, thus halting all vehicle traffic on that street. Applying the IAFC (2022) recommendation, the businesses on Mill Pond Drive would also be evacuated. Additionally, the apartment complex located at the end of Mill Pond could potentially implement a shelter-in-place posture for the duration of the event. Due to the single means of access to the apartments located on Mill Pond, those who are in their apartment at the time of the event must remain for the duration; those who are not in their apartment would not be permitted to return. Persons evacuated due to the emergency would require sheltering for the duration of an incident.

Application of the shortest recommended distance would also require closing Salmon Brook Street, a state highway, and a significant north/south trafficway. The average daily trip count (number of vehicles traveling that stretch of RTE 10 & 202) is roughly 10,000 vehicles (Granby, 2022). Closing Salmon Brook Street, even temporarily, would divert that traffic onto Canton Road and Floydville Road – narrow secondary streets that normally feature one-quarter of that number of vehicles. Those roads and others that would be affected simply cannot sustain the increased number of vehicles over the time necessary to mitigate a BESS emergency.

Distances greater than the minimum have been applied in several BESS or lithium-ion battery fire incidents in the United States. Locations within 1300 feet (one-quarter of a mile – a reasonable evacuation distance) include, but are not limited to:

- The Grand apartment complex
- The Farmington Valley YMCA
- The child daycare (infant age and up) at the YMCA
- Stop and Shop grocery store
- TJ Maxx store

A Group Care facility is located less than one-half mile (2,000 feet) from the site.

Any evacuation is a labor-intensive process. So, too, is shelter for the evacuees. The Town does not possess the resources and personnel to adequately discharge that responsibility in the compressed time frame of an emergency. The current deployment of the police department (two patrol officers and one supervisor) does not have the capacity to simultaneously provide incident scene security and traffic management, evacuation notification, and evacuation traffic movement. Additional resources can be ordered from outside the agency, but that takes time, lessening the likelihood of a positive outcome.

Commentary on the applicant's Emergency Operations Plan and other documentation

The submitted Emergency Operations Plan (EOP) is serviceable. That document, and others submitted by the applicant, indicate compliance with National Fire Protection Association Standard 855, Standard for the Installation of Stationary Stored Energy Systems. That standard requires the applicant to ensure the local responders having jurisdiction are trained. The documentation provided by the applicant does not include specificity on the frequency, duration, and topic of such training.

The EOP also calls for notifying the responsible party in the event of an emergency or other occurrence at the facility. It does not, however, include a time frame for responding to the emergency. Given the risk and hazard, as well as unfamiliarity with the system and technology (if the project is approved), the Siting Council and/or the Town of Granby should require a physical response to the affected location in less than two hours from the time of a confirmed spill, fire, thermal runaway, or other event at the facility.

Additional documentation from the applicant indicates that the battery system (Sol Bank 3.0) complies with NFPA 855, UL 9540, and 9540A, as well as other standards. However, the Underwriters Laboratory database (<https://iq.ulprospector.com/en>) for approved batteries does not show this battery unit. This may be an omission of the company (choosing not to list it in the database) or an indication that the battery is not fully compliant. Either should be verified, with appropriate written documentation from independent third-party testing companies, before approving this project.

Noted on page 5 of the applicant's proposal, it states that the electrical connection will be made using a 23kv overhead line to Mill Pond. Subsequently, page 5 also states that the electrical connection will occur at 100 Salmon Brook Street. This conflict should be resolved.

Finally, the project address is noted as 100 Salmon Brook Street, the official street address for the property. The proposed project access is not from Salmon Brook Street. The application indicates that the plan is to utilize a small right-of-way through a commercial parking lot off Mill Pond Drive. That driveway is not sized for emergency vehicles. The address of the project should be modified to reflect the location of the driveway/right-of-way access.

Conclusion

It is notable that the applicant has not proposed similar projects in similarly situated communities. Granby is a rural community with limited infrastructure and emergency services scaled to meet the expectations of a small town. The site does not have sufficient infrastructure, including a road network and water supply, to support the risks and hazards

that a BESS facility can generate. Moreover, the Town lacks the fire or law enforcement capacity to address the risks and hazards a BESS facility can generate.

It is overly optimistic to assume that, if approved, 'nothing' will ever happen. The applicant and the manufacturers of the BESS certainly hope that is the outcome. Hope is not a strategy that leads to success. Preparation, understanding of the potential risk, and having the necessary resources (people and equipment) are strategies for success.

This project should not be approved until and unless the Town of Granby is satisfied that all concerns enumerated above have been solved.

Bibliography

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Profile

An exceptional leader with a proven track record of execution in high-stress and high-performing public safety arenas. Effective communicator, talented educator, skilled fire ground commander, data knowledgeable.

Experience

2021-present President & CEO; International Public Safety Data Institute, McLean, VA

Chief Executive Officer and Leader of a non-profit focused on fire service data, analytics, and research. As CEO, he is responsible for the growth, adoption, and continuous improvement of the National Fire Operations Reporting System (NFORS), Fire-Community Assessment Response Evaluation System (FireCARES), and the NFORS Exposure Tracker mobile app.

- Completed transition to in-source all technical capabilities, including integration, resulting in more efficient and effective customer response.
- Added contract staff capacity, including WUI subject matter expertise, to increase capability and responsiveness.
- Continued to grow partnerships, resulting in expanded project and contract opportunities, including awarded contracts for community risk assessments at the state and community levels.
- Planned and designed improvement and enhancement of the NFORS Exposure Tracker app utilizing funds from a successful 2021 Assistance to Firefighters Grant submission.
- Co-authored, on behalf of the Urban Fire Forum, a Position Paper on the Ethical Use of Artificial Intelligence for the fire service.

2008 – 2021 Fire Chief; East Hartford Fire Department, East Hartford, CT

Chief of a 130-member department providing a full range of fire and EMS services to a community of 52,000 residents within a strong-Mayor government.

- **Developed and maintained a strong, cooperative labor-management relationship.**
Aggressive leadership, unending communication, and relationship building resulted in three effective contract negotiations and only one labor grievance in 13 years.
- **Increased focus on health, wellness, and safety.**
Transitioned and enhanced member medical physical program resulting in an indirect savings of \$1,000,000 in the first year. Instituted Peer Fitness program and began a 'Fitness Friday' initiative. Became the first department in the state to implement a behavioral health program that included a vetted and trained Peer Support Team.
- **Increased revenue by over 55% from emergency medical service billing.**
Instituted improved internal processes; increased paramedic training; rebid billing vendor contract and implemented electronic patient care reporting platform to improve service to the patient and enhance revenue recovery.
- **Increased revenue by creating a fee structure for the Fire Marshal's Office.**
Researched and developed Town ordinance changes to modify the fee structure for the Fire Marshal's Office. Worked with the Mayor's Office and Town Council to explain and subsequently pass a revised ordinance. Added over \$500,000 of revenue in the first year.

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- **Authored successful Assistance to Firefighter Grant applications.**
Awarded more than \$7 million in grant funds, including the only ARRA Fire Station Construction grant in Connecticut. Other grants included wellness and fitness equipment, communication system improvements, SCBA replacement, and a PPE cleaning program.
- **Improved planning and operations for mass gathering events.**
Managed events at Pratt Stadium at Rentschler Field (home of UCONN football) and appointed Chairman of the Hartford Marathon Safety and Security Task Force responsible for plan development and execution for the Marathon and associated events across seven jurisdictions using 34 separate agencies. Completely rewrote existing plans, leading to improved interagency coordination and event safety operations in both jurisdictions.
- **Improved fireground operational effectiveness and safety.**
Added Lieutenants on each in-service fire company. Obtained approval from the Mayor and the bargaining unit and successfully lobbied the Town Council for funding in a zero-growth environment.

1988 – 2008 ***Battalion Chief; West Hartford Fire Department, West Hartford, CT***
Also served as Firefighter, Apparatus Operator, Lieutenant, and
Acting Assistant Chief

- Led an on-duty shift of 20 members, providing skilled fire, EMS, and hazmat response to a community of 60,000 residents.
- Developed a program to monitor employee sick time use, coupled with other initiatives, resulting in a 25% reduction in sick leave use.
- Appointed to the Joint Labor/Management Health and Safety Committee in 1997. Tasked with research and development of new safety technologies and procedures. Co-created research package that led to a 2005 Assistance to Firefighters Grant award for diesel exhaust extraction systems. Formalized wear test system for new product evaluation.

Additional Employment and External Professional Contributions

2019 – 2021	President, Connecticut Career Fire Chief's Association Led the organization during the development and execution of a statewide entry-level firefighter testing program and a new fire officer development program. Primary subject matter expert for legislation (PA 19-17) on PTSD and responder behavioral health.
2017– Present	Member, NFPA 3000 Technical Committee on Cross-Functional Emergency Preparedness and Response Appointed as one of the original members of the Technical Committee representing the NFFF. Work within the committee system to develop a standard for preparation, response, and recovery to and from Active Shooter incidents. Assigned as the Task Group Chair for Emerging Technologies.
2017– Present	Member, First Responder Center for Excellence Behavioral Health Advisory Committee In conjunction with several subject matter experts, provide guidance and direction for the FRCE's programs on Firefighter Behavioral Health.
2015-2016	Implementation Specialist, Center for Fire, Rescue & EMS Research (National Development and Research Institutes)

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Retained by Dr. Sara Jahnke to contribute to a FEMA/AFG-funded project evaluating fire department behavioral health interventions. Created and delivered a training program on implementing a behavioral health program and Peer Support Team for seven different US fire departments.

2005 – Present

Advocate, Consultant, National Fallen Firefighters Foundation

Primary point of contact and advocate for the Foundation's Firefighter Line of Duty Death prevention programs within the State of Connecticut. Primary author (2007), White Paper on Fire Service Response to Violent Incidents. Contributor to After Action Review training program (2014); Primary Author Fire Service Response to Violent Incidents Training Program (2015 and 2018).

1999 – Present

Member, NFPA 610, Guide for Emergency and Safety Operations at Motorsports Venues Technical Committee

Served as Committee Chair from 2005 until 2016. One of the original members of a national consensus committee to develop guidelines for safety at motorsports venues. Lead the Task Group on Protective Clothing; member of the document draft Task Group responsible for crafting the original document verbiage.

1995 – Present

Seminar and Classroom Educator

Provide fire officer, mass gathering, data, AI, analytics, firefighter behavioral health, and active shooter subject matter expertise. Presented in over 17 different states and at FDIC (1995, 2024), FDSOA (2017, 2019, 2024), FRCE Behavioral Health Symposium (2019), IAFF ALTS (2020), CFSI (2022, 2024), and others.

Education and Professional Development

May 2015	Master of Science Degree in Fire and Emergency Management, Oklahoma State University
May 1988	Bachelor of Science in Accounting, Franklin Pierce University
October 2005	Executive Fire Officer Program, National Fire Academy
March 2004	National Fire Service Staff and Command, Maryland Fire Rescue Institute

Awards

- **West Hartford Fire Department**
Awarded the department's second highest award, the Bronze Star (2004), and twice awarded Certificate of Commendation (2004, 2005) for performance in emergency incidents.
- **National Fallen Firefighters Foundation**
Everyone Goes Home Program, 2010, Seal of Excellence for Dedication, Leadership, and Commitment to Firefighter Safety.
- **Connecticut State Firefighters Association**
Class of 2019 Inductee of the Connecticut Firefighters Hall of Fame.

Professional references from both local and national efforts available upon request.