

KC CT 11 1637 Public Comment/Questions						
Name	Email	Date	Comment, Question	Follow up- responses	Date of response	Responder
From Mike Walsh- forwarded from Deborah Roe	<a href="mailto:mwalsh@granby-ct.gov">mwalsh@granby-ct.gov</a> <a href="mailto:deb@pacecleanenergy.org">deb@pacecleanenergy.org</a>	8/7/2024	<p>Interesting presentation from Key Capture Energy the other night. It would be good to have more storage on the grid. That said, the battery chemistry used should be the safest available especially given that the proposed location is so close to a commercial and residential area.</p> <p>I think you could make the case that there are safer options than the Li - Phosphate batteries proposed. Battery chemistry is a rapidly evolving area. Paul, the Key Capture rep, said to me after the presentation that there aren't any other viable options on the market right now. This is not the case. Natron started producing Sodium-ion batteries this year on a commercial scale. These have many advantages including being non-flammable. Below is some additional information.</p> <p>Another option is the iron air battery. Form Energy is producing these and has pilot projects established including a 10MW installation.</p> <p>The Siting Council and PURA should make safety the number one priority and require developers to use the safest battery chemistry available even if that means using batteries that are a little less energy dense. Also, these projects shouldn't be rushed. Installing the lithium batteries now would saddle Granby with these risks for 20 years. Though the risk of fire might be small, they have happened in the past. With increasing storm severity in the area, the potential for cyber-attack, and the possibility of faulty batteries, even a supposedly small risk is too big a risk.</p> <p>Deb Roe</p> <p>SODIUM ION Sodium-Ion Batteries &amp; Sustainable Energy   Natron Energy</p> <p>Natron sodium-ion solutions outperform, are significantly safer, and are far more sustainable than lithium-ion options. The secret behind Natron's sodium-ion batteries is our patented use of Prussian blue electrodes. Prussian blue, when combined with sodium ions, creates a chemistry that delivers super-fast charging and power delivery, with no friction. It's that lack of friction that enables our batteries to last much longer (over 50,000 cycles). And it creates a battery that's incapable of thermal runaway, incredibly safe, and made entirely from abundant and readily available resources.</p> <p>Our unique and patented sodium-ion technology features chemistry and construction that cannot be induced to thermal runaway and won't catch fire or explode after puncture, pressure, heat, or electric faults. In short, we're taking battery safety to a whole new level. Others may make claims that sound equivalent, but when you scratch beneath the surface you'll often find that hype fuels their claims, not facts. We encourage you to take a long and thorough look at other battery chemistries, ask for their unredacted cell-level UL9540A tests, and research real world experiences. You'll soon find a world of difference!</p> <p>Unlike other battery chemistries, Natron sodium-ion batteries are not considered hazardous goods and can be shipped fully charged and pre-installed in a battery cabinet. We are the first sodium-ion battery to earn a UL 1973 listing and offer a level of battery safety far beyond anything else on the market.</p> <ul style="list-style-type: none"> <li>•Our batteries have a maximum sustained power-per-energy up to four times higher than lithium-ion and more than five times higher than lead acid batteries.</li> <li>•Our batteries deploy their energy load immediately with no settling or thermal waiting.</li> <li>•In addition, Natron sodium-ion batteries deliver up to 10 times as many deep discharges as lithium-ion batteries and 50 times as many as lead acid batteries.</li> </ul> <p>Natron Energy Achieves First-Ever Commercial-Scale Production of Sodium-Ion Batteries in the U.S. (yahoo.com)</p> <p>Natron's high-performance sodium-ion batteries outperform lithium-ion batteries in power density and recharging speed, require zero lithium, cobalt, copper, nickel, and are non-flammable</p>	<p>Good afternoon Mike, Thank you for sharing the feedback.</p> <p>While there are several non-lithium battery chemistries in development, they are simply not at a competitive price point for KCE to pursue that would be acceptable for Connecticut and New England ratepayers. As Ms. Roe points out, many of these are in pilot stages because the economics do not exist to be price competitive today. At the current state of early stage development neither of these technologies can receive financing for commercial application. KCE engages with many of the companies pursuing these technologies regularly to understand their products and pricing, but the reality is they simply are not where they need to be today. Lithium-ion battery technology is currently the most cost-effective and operational technology to store and discharge energy and as we have discussed these batteries undergo rigorous safety and operational testing before being approved including national and international fire association testing, specifically the UL 9540A test related to fire and thermal events. Additionally, the two technologies that Ms. Roe identified have a much lower energy density, which means they would require a larger project footprint and would not be viable at this location.</p> <p>Thank you and please let me know if I can answer any specific questions. Looking forward to working with you as this progresses.</p> <p>Kind regards</p>	8/9/2024	KCE, Paul Williamson

			<p>Lithium-free sodium batteries exit the lab and enter US production (newatlas.com)          "Sodium-ion batteries offer a unique alternative to lithium-ion, with higher power, faster recharge, longer lifecycle and a completely safe and stable chemistry," Natron founder and co-CEO Colin Wessells said at the event. "The electrification of our economy is dependent on the development and production of new, innovative energy storage solutions. We at Natron are proud to deliver such a battery without the use of conflict minerals or materials with questionable environmental impacts."</p>			
Reinhard W. Maier	<a href="mailto:rwmajer@cox.net">rwmajer@cox.net</a>	8/13/2024	<p>For list of all questions provided below, KCE originally made this overall response on 8/15/2024. After further internal discussion KCE decided providing a full direct response to Mr. Maier's individual questions would be most appropriate. The individual responses were then sent 8/XX/2024.</p>	<p>KCE Initial Response: Mr. Maier          Thank you for these detailed questions. Key Capture Energy (KCE) prides itself on being a trusted and valued member of the communities where our projects are located and working with our host communities proactively and constructively. KCE is currently working through the formal review process at the Connecticut Siting Council, where detailed questions like these can be submitted and answered publicly. You can find the application information at PE1637 (ct.gov) and submit questions for the project to the Connecticut Siting Council via email to <a href="mailto:siting.council@ct.gov">siting.council@ct.gov</a> – reference Petition No. 1637. Additionally, the Town of Granby has applied to be a party to the Siting Council process and these questions can also be directed to the Town for inclusion through a special email set up by the Town of Granby: <a href="mailto:batteryproject@granby-ct.gov">batteryproject@granby-ct.gov</a>.          Sincerely,          The KCE Team</p>	8/15/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmajer@cox.net">rwmajer@cox.net</a>	8/13/2024	Please provide the identification number of te unit to be furnished in the project	Canadian Solar, e-STORAGE-SolBank3.0-S-5016-4h-NA	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmajer@cox.net">rwmajer@cox.net</a>	8/13/2024	Has Eversource approved the switch from a Sungrow to the Solbank? If not, what is the projected schedule	KCE CT 11 is still in the process of review of the request for the equipment modification. We expect the process to be completed by mid to late September.	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmajer@cox.net">rwmajer@cox.net</a>	8/13/2024	Did Eversource provide an approval for an interconnection with the Sungrow product? If so please provide a copy of the technical features. This is not a request for terms and conditions of an agreement	Eversource provided a complete system impact study report and a draft interconnection agreement for KCE CT 11, LLC. The interconnection agreement is pending final review of the request to modify the equipment. It is KCE's understanding that both the study report and the interconnection agreement documents are covered by Critical Energy/Electric Infrastructure Information (CEII) requirements and the document nor portions of the documents may not be distributed to individuals without CEII clearance.	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmajer@cox.net">rwmajer@cox.net</a>	8/13/2024	Based on the SolBank 3.0 each battery has about 4.8 MWh of storage. What is the reason for installing 8 batteries... eg increasing output from 4 to 8 hours?	The initial design for permitting is based on the life performance of the project with the required equipment provided at the end of life of the project. The project is designed to account for battery degradation over time, which includes the initial installation of units, then augmentation with additional units over the life of the project.	8/28/2024	KCE Chris Linsmayer

Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	Is KCE planning to divide the site into two separate projects legally?	The project is represented by one legal entity, KCE CT 1, LLC. There are no current plans to alter or add additional legal entities to the project.	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	What is the normal operating temperature of the 314 Ah battery cell?	Operating Temperature (Ambient) -30 °C to 55 °C (derating between 45°C to 55°C)	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	What is the maximum safe operating temperature of the cell?	See response to previous question.	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	Has the battery cell been tested to failure after the cooling fluid flow is terminated?	The Solbank 3.0 system is tested to meet the standards of the following UL codes. These tests included inducing failure (thermal overload) of cells: <ul style="list-style-type: none"> <li>• UL9540A (cell) - Test completed: Q4, 2023; Installation ventilation requirements; fire protection (integral or external); Fire service strategy</li> <li>• UL9540A (module) - Test completed: Q1, 2024; Installation ventilation requirements; fire protection (integral or external); Fire service strategy</li> <li>• UL9540A (rack) - Test completed: Q2, 2024; Installation ventilation requirements; fire protection (integral or external); Fire service strategy</li> <li>• UL1973 (cell) - Test completed: Q1, 2024; Test ability to withstand fire from the outside and inside of BESS without cascading between modules</li> <li>• UL1973 (rack) - Test completed: Q2, 2024; Test ability to withstand fire from the outside and inside of BESS without cascading between modules</li> </ul>	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	Please provide a copy of the test report	KCE does not have access to these reports. NFPA 855 and UL 9540A are the primary codes that govern energy storage systems. Under those codes, burn testing per UL 9540A is required at the cell, module, and rack levels. The proposed Canadian Solar technology has performed these tests and passed all applicable criteria. As part of the building permit process, the associated test reports may be requested by the AHJ for their review and acceptance.	8/28/2024	KCE Chris Linsmayer
Reinhard W. Maier	<a href="mailto:rwmmaier@cox.net">rwmmaier@cox.net</a>	8/13/2024	Are any of these types/model batteries currently operating and for how long?	According to Canadian Solar, as of 6/30/2024 there are 1,406 MW/ 4,926 MWhs of capacity of Sol bank 1.0 operating systems the US, UK and China, with an additional 2,303 MW of Solbak systems contracted. They currently have 5,000 MW of the SolBank 3.0 being contracted, including this project.	8/28/2024	KCE Chris Linsmayer
Toni	<a href="mailto:tff4205@cox.net">tff4205@cox.net</a>	8/7/2024	Are you being paid with tax payer money?	Dear Tony, Thank you for attending our Public Open House event on August 7th to learn more about the proposed battery energy storage system at 100 Salmon Brook St, Granby. We hope the event was informational for you. I am writing to respond to the written question you submitted at the event. Please see my response and let me know if you have any further questions.  Q: Are you being paid with tax payer money? A: KCE CT 11 is not receiving any Connecticut or Federal Tax payer funds. Once operational, the project does expect to qualify for federal tax credits.  KCE will also provide a report of this questions and a record of our answers to the CT siting council to ensure the record is complete through the permitting process.	8/28/2024	KCE, Paul Williamson