

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Petition of Northfield BESS 1 LLC for a )  
Certificate of Public Good, pursuant to 30 V.S.A. )  
§§ 231 and 248(j), authorizing the ownership, )  
installation, and operation of a 3 MW battery )                   Case No. 23-\_\_\_\_-PET  
electric storage project to be located in )  
Northfield, Vermont to be known as the )  
“Northfield BESS Project” )

**PREFILED TESTIMONY OF MICHAEL HERBERT  
ON BEHALF OF NORTHFIELD BESS 1 LLC**

*This document and all associated exhibits have been filed via ePUC*

October 20, 2023

**Summary of Testimony**

Mr. Herbert’s testimony provides an overview of the proposed Project and addresses its compliance with the following Section 248(b) criteria: need for the project; economic benefits; air purity; greenhouse gases; transportation systems; educational services; municipal services; development affecting public investments; historic resources; consistency with integrated resource plan; compliance with state energy plan; and decommissioning. Mr. Herbert also testifies regarding how Northfield BESS meets the requirements to be issued a Section 231 CPG.

**EXHIBIT LIST**

Exhibit NBESS-MH-1	Resume
Exhibit NBESS-MH-2	Site Plans and Cross Sections
Exhibit NBESS-MH-3	Illustrative Equipment Specifications
Exhibit NBESS-MH-4	Decommissioning Plan & Letter of Credit
Exhibit NBESS-MH-5	Northfield Planning Commission Letter
Exhibit NBESS-MH-6	Battery Safety and Emergency Response Information
Exhibit NBESS-MH-7	UVM CAP Phase I Archeological Report

1 **Introduction**

2 **Q1. Please state your name, current employer, business address, and position.**

3 A1. My name is Michael Herbert, and I am a Managing Partner and Co-Founder of Delorean  
4 Power LLC, which is the sole member of Petitioner Northfield BESS 1 LLC (“Northfield  
5 BESS” or “Petitioner”). Delorean Power’s principal place of business is 1201 Wilson Blvd,  
6 Floor 27, Arlington, VA 22209.

7  
8 **Q2. Please describe your educational background and work experience.**

9 A2. I have over a decade of energy storage development, investment analysis, policy and market  
10 design experience. Since co-founding Delorean Power in 2019, I have served as lead on  
11 market analysis and strategy as well as application design and analytics at Delorean and co-  
12 manage corporate strategy for the company. Prior to working for Delorean, I served as the  
13 Energy Storage Policy Coordinator at the Federal Energy Regulatory Commission  
14 (“FERC”), overseeing all energy storage policy development, and most notably providing  
15 technical leadership for a landmark rulemaking, Order No. 841, which facilitated the  
16 participation of energy storage resources in the organized wholesale electricity markets. I  
17 began my career analyzing investments in electric vehicles, vehicle-to-grid systems, energy  
18 storage and renewable energy for the Department of Defense. I hold a bachelor’s degree  
19 from Northwestern University’s Weinberg College of Arts and Sciences in Evanston, Illinois  
20 and joint masters degrees from Indiana University’s School of Public and Environmental  
21 Affairs in Bloomington, Indiana. My resume is attached as *Exhibit NBESS-MH-1*.

22

1 **Q3. Have you testified previously before the Public Utility Commission (“Commission”**  
2 **or “PUC”)?**

3 A3. No, I have not provided testimony to the Commission before.

4  
5 **Q4. What is the purpose of your testimony?**

6 A4. My testimony supports Northfield BESS’s Petition for Certificates of Public Good  
7 (“CPGs”) pursuant to 30 V.S.A §§ 231 and 248(j) with respect to the Petitioner’s proposal to  
8 own, install, and operate a 3 MW battery electric storage project to be located in Northfield,  
9 Vermont (the “Project” or “BESS”).

10 In Section I, I first provide a Project overview and then specifically address the  
11 following Section 248(b) criteria in Section II:

- 12 • (b)(2) – need for the project;
- 13 • (b)(4) – economic benefits;
- 14 • (b)(5) – air purity, greenhouse gas impacts, transportation systems/traffic,  
15 educational and municipal services, development affecting public investments,  
16 historic resources; and decommissioning (PUC Rule 5.900);
- 17 • (b)(6) – consistency with the Integrated Resource Plan;
- 18 • (b)(7) – compliance with the Vermont electric energy plan; and

19 In Section III of my testimony, I provide information regarding the experience and  
20 financial stability of Northfield BESS and its parent company that supports the factors  
21 considered by the Commission with respect to Section 231.

22

1           The other Section 248 criteria are addressed by other witnesses. Witness Art Gilman  
2 addresses the Project’s compliance with environmental Section 248 criteria including:  
3 outstanding resource waters; the natural environment and use of natural resources;  
4 headwaters; streams; shorelines; wetlands; rare and irreplaceable natural areas; necessary  
5 wildlife habitat; and endangered species. Witness Abby Dery addresses Project engineering  
6 specifics, including compliance with Section 248(b)(5) criteria on water pollution, supply and  
7 use; soil erosion; waste disposal; floodways; and primary agricultural soils. Witness Joseph  
8 Leavitt addresses compliance with Section 248 (b)(2) system stability and reliability, (b)(5)  
9 public health and safety, and (b)(10) transmission systems criteria. Witness Lucy Thayer  
10 addresses Section 248 (b)(1) orderly development and (b)(5) aesthetics criteria. Finally,  
11 Witness Ryan Haac addresses the Project’s compliance with the (b)(5) air purity criterion.  
12

13       **I. Project Description and Overview**

14       **Q5. Please generally describe the proposed Project.**

15       A5. Northfield BESS proposes to install and operate a 3 MW battery electric storage facility on  
16 approximately 0.3 acres of a ± 0.47-acre parcel off King Street in Northfield, Vermont. The  
17 Project site is located adjacent to an existing Northfield Electric Department (“NED”)  
18 electrical substation. Northfield BESS owns this parcel.

19           The Project is the result of a Request for Proposals (“RFP”) issued by Vermont  
20 Public Power Supply Authority (“VPPSA”) to provide VPPSA and its member (NED) with  
21 peak reduction services. The BESS will provide these services to VPPSA, which will in turn  
22 convey those benefits to NED. In addition, when it is not providing peak reduction services  
23 to VPPSA/NED, the BESS will be able to participate in the ISO-NE frequency regulation

1 markets via conveyance of electricity that is charged and discharged through the distribution  
2 grid.

3 The Project will consist of up to six (6) integrated battery energy storage containers  
4 connected to two inverters with a nameplate capacity of 4200 kVA (to convert the power  
5 from AC to DC for storage, and then back to AC) and to a pad-mounted transformer.  
6 Energy will be withdrawn from NED's grid, typically during off-peak periods, and stored in  
7 the BESS. This energy will then be discharged back to NED's grid, typically during peak  
8 periods. The Project will be interconnected to NED's grid through the adjacent substation.  
9

10 **Q6. Please generally describe the site plan and specific Project equipment.**

11 A6. The fenced-in Project area will occupy less than half of the Project parcel, adjacent to an  
12 existing NED electrical substation. The site is currently a residential lot with two existing  
13 buildings. The Project will be set back approximately 75 feet from King Street and will be  
14 installed on a gravel site pad enclosed by a chain link metal fence (similar to the type used at  
15 substations, including the adjacent substation). The fence will be at least seven feet high and  
16 meet applicable electric safety code standards. An underground electric line will run from  
17 the Project to a new riser pole south of the substation where it will then run east, overhead  
18 via three new poles to tap into an existing feeder off the south side of NED's existing  
19 substation. The poles will be field located by NED. A site plan showing the Project  
20 location and design is included as *Exhibit NBESS-MH-2*. The area where the Project will  
21 be located is currently an open field with a single tree, which will be removed for the Project.

22 The Project is a 3 MW ( $\pm$ ) BESS, or the equivalent, contained within up to six  
23 containers (approximately 26' in length and 9' in height each). Each container will sit on

1 concrete footers. The total capacity of the batteries will be up to 13.38 MWh. Other Project  
2 equipment will include an auxiliary transformer, an integrated inverter and medium voltage  
3 transformer pad-mounted skid rated at 4200 kVA, communications cabinet, and metering  
4 switch.

5 Northfield BESS has also incorporated mitigation plantings and sound barriers into  
6 the site design. The proposed landscaping is described in more detail in Ms. Thayer's  
7 testimony and report, and is responsive to a request by the Town of Northfield (as discussed  
8 further below). In addition to the plantings, two sound barriers have been incorporated into  
9 the Project design: one that will surround the pad-mounted transformer and inverter on  
10 three sides, and one that will run on the south and western borders of the Project fence line.  
11 These barriers will be approximately 10-feet tall and made of dura-crete or other similar  
12 material. See *Exhibit NBESS-MH-2*.

13 Typical equipment specification sheets are provided in *Exhibit NBESS-MH-3*.  
14 Equipment selection will be finalized following issuance of a CPG, but the equipment and  
15 design will be substantially similar to that shown in *Exhibits NBESS-MH-2* and *NBESS-*  
16 *MH-3*.

17  
18 **Q7. Please describe how operation of the Project will be managed.**

19 A7. The BESS will provide peak reduction services to VPPSA/NED. Delorean Power will  
20 discharge the BESS when the local grid and regional transmission lines are at their most  
21 congested and energy usage is at its highest. By discharging the BESS at these times,  
22 VPPSA/ NED will not only be able to potentially save money for their ratepayers, but the  
23 BESS may also reduce the need for additional distribution and transmission lines, as well as

1 additional power plants. Potentially avoiding the build-out of this equipment reduces the  
2 need for fossil fuel generation and new transmission lines, which can reduce overall carbon  
3 emissions on the New England electric grid.

4 The BESS will also be equipped to participate in ISO-NE's frequency regulation  
5 markets. These markets are what allow the regional grid operators to match energy supply  
6 and demand on a second-by-second basis. Systems like this proposed BESS generally allow  
7 for greater penetration of renewables onto the grid by providing the grid operators with  
8 dispatchable resources to compensate for the non-dispatchable renewables.

9 Northfield BESS will maintain ownership throughout the life of the Project and will  
10 be responsible for operations and maintenance as well as dispatching of the BESS.  
11 Northfield BESS will also be responsible for decommissioning the system at the end of its  
12 life.

13  
14 **Q8. Please describe the process by which VPPSA solicited and evaluated proposals for**  
15 **distributed generation in its Member Service Territories.**

16 A8. In October of 2020, VPPSA issued the first stage of an RFP for electricity storage facilities  
17 on sites located within VPPSA Member service territories as identified by the Members. The  
18 RFP also allowed for "alternative" sites to be proposed by respondents to the RFP. VPPSA  
19 conducted an initial screening of these proposals for economic viability and to limit the  
20 number of developers being considered in relation to each site. In May 2021, VPPSA then  
21 solicited firm bids from the short list of four developers on the sites that appeared to be  
22 economically viable. After thorough review of pricing and qualifications of respondents,  
23 VPPSA selected Delorean Power to develop several battery energy storage facilities on

1           behalf of its Member utilities. The VPPSA RFP included a site in Northfield called “King  
2           St. Substation.” Delorean Power had already gained site control of private land adjacent to  
3           the substation, ultimately leading to the Northfield BESS proposal.

4                     Delorean Power is currently in active commercial negotiations with VPPSA  
5           regarding the Energy Storage Services Agreement (“ESSA”) for the Northfield BESS  
6           project. Both parties are negotiating in good faith to identify the structure most beneficial to  
7           VPPSA and NED and will execute the agreement prior to breaking ground on the site.

8  
9   **Q9. Is this Project appropriate for review under 30 V.S.A § 248(j)?**

10   A9. Yes. The Project is a facility of limited size and scope in that it will only occupy  
11       approximately 8,500 square feet of the parcel (less than 0.3 acres) and will contain a small  
12       amount of equipment and infrastructure that avoids environmental resources. Furthermore,  
13       as shown in the testimony and exhibits included in the Petition, the Project does not raise a  
14       significant issue with respect to any applicable substantive criteria of 30 V.S.A. § 248.

15  
16   **Q10. How will the Petitioner and other authorized personnel access the Project?**

17   A10. An approximately 48-foot-long and 15 to 20-foot-wide extension will be added to the  
18       existing driveway off King Street. The extension will connect the driveway to the gated  
19       fence to the Project site. *See Exhibit NBESS-MH-2.* The Project will be surrounded by a  
20       7-foot-high perimeter fence that will meet applicable electric safety code standards.

21  
22   **Q11. Is the Petitioner proposing lighting for the Project?**

1 A11. The Project will have lighting internal to the containers, but the lights will be off under  
2 normal operating conditions. The lights will only be turned on if personnel are present on  
3 the site after dark for maintenance or other activities, which will be a rare occurrence. Even  
4 when lights are on, all lighting will be downcast. As a result, Project lighting will not cause  
5 any undue adverse impacts.

6

7 **Q12. Please explain the proposed construction process and schedule.**

8 A12. Northfield BESS estimates that the Project will take approximately 15 weeks to construct.

9 The current plan for construction will involve the following steps:

- 10
- Preparation of the site and installation of the staging area;
  - 11 • Civil work preparing the concrete footers on which the containers and other  
12 equipment will be placed;
  - 13 • Placement and installation of the BESS and other equipment;
  - 14 • Electrical wiring of the BESS to the inverters and of the inverters to the  
15 transformers and the transformers to the metering switch;
  - 16 • Installation of gravel/ground treatment to control vegetation and maintain safe  
17 access to the site;
  - 18 • Installation of fence and sound barriers to adhere to aesthetics plan and noise  
19 mitigation strategy;
  - 20 • Installation of landscape plantings (when seasonally appropriate); and
  - 21 • Testing and commissioning.

1                   Construction activities and related deliveries will be limited to 7:00 A.M.–7:00 P.M.  
2                   on weekdays, 8:00 A.M.– 5:00 P.M. on Saturdays and no construction on Sundays or state or  
3                   federal holidays.

4  
5   **Q13. Will the Project require grading?**

6   A13. Yes. Limited grading is necessary to make the site more level. grading is indicated on the site  
7           plan, *Exh. NBESS-MH-2*.

8  
9   **Q14. What are the Project’s operation and maintenance activities?**

10   A14. Once the Project is fully commissioned, operations and maintenance activities will be  
11           minimal. Northfield BESS will perform routine system maintenance approximately two  
12           times per year, which will consist of mechanical and electrical inspections. Northfield BESS  
13           will remotely monitor operations, and in the event of a system malfunction, personnel will  
14           visit the site for troubleshooting or repairs.

15  
16   **Q15. Will the Project be decommissioned at the end of its useful life?**

17   A15. Yes. At the end of the Project’s useful life, Northfield BESS will remove Project  
18           infrastructure and restore the site to its current condition to the greatest extent practicable.  
19           Although electrical storage projects are not specifically included in the Commission’s  
20           Decommissioning Rule (PUC Rule 5.904(B)), Northfield BESS has prepared a  
21           Decommissioning Plan outlining the steps and cost estimate for decommissioning activities  
22           is included as *Exhibit NBESS-MH-4*. The decommissioning cost will be secured by a  
23           Letter of Credit. Northfield BESS has included a template for the Letter of Credit and

1 Drawing Certificate in the Decommissioning Plan that conforms to the Commission's  
2 standards for these documents.

3  
4 **Q16. Please describe any substantive written comments received by Northfield BESS in**  
5 **response to the 45-day notice letter and any other public outreach related to the**  
6 **Project.**

7 A16. In response to the 45-day notice letter, Northfield BESS received a comment letter from the  
8 Planning Commission for the Town of Northfield, Vermont, dated August 2, 2022. The  
9 letter contained a recommendation that the Project be screened in a manner that would  
10 mitigate aesthetics to the neighborhood where it is located. See *Exhibit NBESS-MH-5*.  
11 In response to this recommendation, Northfield BESS has included proposed mitigation  
12 plantings on both the northeast corner and the southwest corners of the Project to help  
13 screen views of Project infrastructure. See Mitigation Planting Plan, *Exhibit NBESS-LT-3*.  
14 The mitigation planting plan is discussed in more detail in the testimony and exhibits of Lucy  
15 Thayer.

16  
17 **II. Section 248 Criteria**

18 **Need for Project (30 V.S.A. § 248(b)(2))**

19 **Q17. Is the Project needed to meet present and future demand for electric service?**

20 A17. Yes. The Project was selected by VPPSA/NED through a competitive RFP to supply  
21 VPPSA/NED with long-term peak reduction services. The Project will be connected to  
22 NED's distribution grid and by charging it during off peak times and discharging during on  
23 peak times, it will complement VPPSA/NED's growing renewable energy portfolio to

1 reduce peak demand and reliance on fossil fuel resources during peak periods. The Project  
2 will thus assist VPPSA/NED to meet their present and future service demands for electric  
3 service during peak periods which have become increasingly constrained in New England  
4 due to the region's reliance on natural gas. Per the RFP, VPPSA will contract with  
5 Northfield BESS to provide peak reduction services for a 20-year term. The system will be  
6 dispatched during 13 coincident peak hours each year (12 monthly coincident peak hours  
7 and the single annual coincident peak hour), which are the most constrained hours on the  
8 Vermont and broader New England grid.

9 While the Project will help enable VPPSA/NED to realize cost-savings for NED  
10 customers, the Project will not be financed by NED ratepayers. Rather, the Project will be  
11 financed and owned by Northfield BESS and offer services to VPPSA/NED through a  
12 long-term contract.

13  
14 **Economic Benefits (30 V.S.A. § 248(b)(4))**

15 **Q18. Will the Project result in an economic benefit to the State and its residents?**

16 A18. Yes. The Project will benefit the state and its residents by securing long-term stable supply  
17 of peak capacity. In addition to providing potential cost savings for NED customers, the  
18 Project will generate municipal property tax revenue for the Town of Northfield and  
19 education property tax revenue for the State of Vermont. The Project will also provide  
20 economic benefits by using in-state attorneys, contractors, and consultants to construct the  
21 Project. Over the long term, the Project will help reduce the need for additional  
22 transmission, distribution, and generation infrastructure.

23

1 **Q19. Can you describe more specifically the potential economic benefit of the Project to**  
2 **NED?**

3 A19. The Project will aim to directly reduce NED’s wholesale electric consumption and costs by  
4 discharging during the 12 monthly coincident peak hours used to allocate transmission  
5 charges and the single annual coincident peak hour used to establish capacity obligations.  
6 The Project will also support the further integration of renewable energy on NED’s system  
7 by helping to manage the variable energy loads, as well as defer the costs of building out the  
8 distribution system to support increased electrification and renewable energy resources. The  
9 Project is also being designed with the option to provide resilience in the case of grid  
10 outages to the town of Northfield in the future.

11  
12 **Air Purity (30 V.S.A. § 248(b)(5))**

13 **Q20. Will this Project result in undue adverse effects on air purity?**

14 A20. No, the Project will not involve any industrial/manufacturing emissions, excessive dust or  
15 smoke during construction, dust or noise from blasting, odors, or excessive noise from  
16 construction activity. Any emissions during construction will be minimal and temporary,  
17 generated by typical construction equipment. Additionally, the Project can help reduce  
18 reliance on carbon-based sources of electric energy during peak demand periods, thereby  
19 contributing to improved air quality.

20 With respect to potential noise-related impacts, please see Mr. Haac’s testimony and  
21 exhibits.

22  
23  
24



1                                    **Transportation Systems/Traffic (10 V.S.A. § 6086(b)(5))**

2    **Q22. Will the Project cause unreasonable congestion or unsafe conditions with respect to**  
3                    **use of the highways, waterways, railways, airports or airways, and other means of**  
4                    **transportation existing or proposed?**

5    A22. No. Northfield BESS proposes to deliver materials to the Project site via King Street and  
6                    other state and local roads, which are accustomed to the type of traffic representative of the  
7                    proposed material delivery. All construction equipment and material will be transported to  
8                    the site with standard width trucks, such as box trucks, tractor trailers, cement trucks, and  
9                    dump trucks. No oversized loads are anticipated, and the Project will not require road  
10                  closures or lane shutdowns for extended periods of time. No other long-term interruptions  
11                  or impacts to highways or local roads are anticipated.

12  
13                                    **Educational Services (10 V.S.A. § 6086(b)(5))**

14    **Q23. Will the Project place an unreasonable burden on the Town of Northfield to provide**  
15                    **educational services?**

16    A23. No. The Project will not result in the addition of any students to the Northfield school  
17                    system or have any impact on the provision of education services.

18  
19                                    **Municipal Services (10 V.S.A. § 6086(b)(5))**

20    **Q24. Will the Project need municipal services, including any special police, fire, or rescue**  
21                    **services, place an unreasonable burden on the ability of the local government to**  
22                    **provide municipal or governmental services, or would training be required?**

1 A24. No. The Project will not require any municipal water or sewer services, nor new roadway  
2 acceptance or maintenance by the Town of Northfield. The fire hydrant located in front of  
3 the adjacent substation will provide water in case of a fire emergency. Northfield BESS will  
4 be in contact with the local Fire Chief and will offer to provide training on best practices for  
5 the local firefighters. In the unlikely event of a fire, it is recommended that first responders  
6 adopt a defensive firefighting posture and monitor the energy storage system until the fire  
7 burns itself out. It is not recommended that first responders approach the system or  
8 attempt to pre-emptively extinguish the fire. Water should be applied to the neighboring  
9 containers/structures to prevent the spread of the fire. For this reason, first responders will  
10 not require any specialized equipment due to the Project.

11 In addition, the design of the battery containers minimizes the risk that a fire could  
12 occur. Each enclosure includes multiple layers of fire protection, including 24/7 remote  
13 monitoring and automatic shut-off, an integrated cooling system, integrated ventilation, and  
14 fire suppression. The containers will not include any accessible interiors, which eliminates  
15 the possibility that maintenance personnel or first responders could be inside during a fire  
16 event. See Battery Safety and Emergency Response information provided in *Exhibit*  
17 *NBESS-MH-6*. The proposed energy storage system complies with all applicable  
18 certifications and testing requirements including National Fire Protection Association  
19 Standards, National Electric Codes and UL 9540, UL 9540A, UL 1741, and UL 1973.

20  
21 **Development Affecting Public Investments (10 V.S.A. § 6086(b)(5))**

22 **Q25. Will the Project unnecessarily or unreasonably endanger any public or quasi-public**  
23 **investment in the facility, service, or lands, or materially jeopardize or interfere with**



1 A27. No, there will be no adverse impacts to any archaeological resources due to the Project.  
2 Northfield BESS requested that DHP conduct a desktop review of the Project site and the  
3 surrounding area to identify any potential above-ground historic resources. DHP staff  
4 confirmed to Northfield BESS via email that a desktop review has been conducted and that  
5 although a house on the site is more than fifty years old, DHP determined it is not listed or  
6 likely to be eligible for the State Register of Historic Places. DHP stated that it will file a  
7 comment letter after the petition for the Project is filed.  
8

9 **Integrated Resource Plan (30 V.S.A. § 248(b)(6))**

10 **Q28. Is the Project consistent with the principles for resource selection expressed in the**  
11 **company’s approved least-cost integrated plan?**

12 A28. Northfield BESS is a non-utility BESS facility owner and operator, and as such is not  
13 required to have an approved least-cost integrated plan. This criterion is therefore  
14 inapplicable, consistent with the Commission’s approach to similar projects.<sup>2</sup>  
15

16 **Compliance with the Comprehensive Electric Plan (30 V.S.A. § 248(b)(7))**

17 **Q29. Is the Project consistent with the State comprehensive electric energy plan?**

18 A29. Yes. The 2022 Comprehensive Energy Plan (“CEP”) recognizes the growing importance of  
19 energy storage technology, noting that it can “help manage peaks, time-shift demand and  
20 supply, smooth renewables integration, provide frequency regulation and other grid support,  
21 and—if properly configured—provide resilience during grid outages.” CEP at 70. The  
22 Project is consistent with these purposes and will be used to reduce electric demand during

---

<sup>2</sup> See, e.g., *Petition of E. BarreCo Corp LLC*, Case No. 18-1658-PET, Final Order of 10/4/18 at 19.

1 peak periods for VPPSA/NED. In addition, Northfield BESS has requested a  
2 determination from the Department of Public Service that the Project is consistent with the  
3 CEP, and anticipates that it will receive confirmation from the Department as part of this  
4 proceeding.

5  
6 **III. Section 231 Factors**

7 **Q30. Please describe Northfield BESS 1 LLC and its parent company.**

8 A30. Northfield BESS 1 LLC is a Vermont limited liability company with a business address of  
9 1201 Wilson Blvd, Arlington, VA 22209. Northfield BESS is a single-purpose manager-  
10 managed entity whose sole managers are Michael Herbert and Rory Jones of Delorean  
11 Power LLC (“Delorean”), a Delaware limited liability company with the same business  
12 address in Arlington, VA. Delorean Power has been developing energy storage projects  
13 since its founding in January 2019.

14  
15 **Q31. Please describe the business reputation of Northfield BESS.**

16 A31. Northfield BESS’s business reputation stems from Delorean Power’s. Delorean Power is a  
17 utility-scale energy storage development company that focuses on the development, design,  
18 financing, construction, ownership and operations of utility-scale energy storage projects in  
19 the US. Delorean specializes in innovative standalone storage solutions that reduce costs  
20 and improve power-system reliability for its partners. Delorean’s team has experience  
21 working closely with utilities, large electric consumers, municipalities, and rural electric  
22 cooperatives to bring new investment in cutting-edge energy storage technology to the  
23 communities that they serve. Delorean’s leadership team combines decades of project

1 development, finance, engineering and energy sector expertise with a commitment to  
2 accelerating the shift to a reliable, sustainable and cost-effective future through energy  
3 storage.

4  
5 **Q32. What kind of technical or regulatory experience and knowledge does Northfield**  
6 **BESS have with respect to this type of Project?**

7 A32. Northfield BESS's technical and regulatory experience stems from Delorean Power's.  
8 Delorean Power was formed in 2019 and currently has 27 employees across its analytics,  
9 development, engineering, construction, and asset management teams. Delorean is currently  
10 developing over 2,000 MW of energy storage systems.

11 In particular, Delorean Power specializes in novel applications of energy-storage  
12 technology for municipal utilities like NED and joint action agencies like VPPSA. Delorean  
13 Power's first 10.5 MW, 25 MWh project was energized in 2022 with Danville Utilities in  
14 Danville, Virginia, providing peak reduction services for Danville that are similar to those  
15 that will be provided by this Project. Delorean also has a broader partnership in place with  
16 VPPSA to develop additional BESS projects in Vermont, is working on a portfolio of  
17 projects with municipal utilities in Massachusetts, and has a large pipeline of projects that  
18 will be developed, built, and commercialized in the coming years across the US with  
19 municipal utilities, rural electric cooperatives, investor-owned utilities, and large corporate  
20 buyers.

21 Delorean plans to leverage partnerships with experienced and trusted construction,  
22 operations, and maintenance teams, as well as a Network Operations Center ("NOC")

1           staffed 24/7. As a company wholly owned by Delorean, Northfield BESS will have access  
2           to all of Delorean's employees and partners.

3                         Delorean was selected by VPPSA/NED in part due to Delorean's extensive  
4           experience developing these types of projects.

5  
6   **Q33. Please address Northfield BESS's financial stability and ability to obtain financing.**

7   A33. Northfield BESS's financial stability and its ability to obtain financing stems from Delorean.  
8       Delorean is financially stable and has an established history of being able to obtain financing,  
9       which is true for the current Project as well. Delorean has developed, constructed, and  
10      commissioned one energy storage project to date, with a large pipeline of at least 30 projects  
11      that will be financed and enter construction over the next 24 to 36 months, including three  
12      actively under construction, each of which will be executed through a similar corporate  
13      structure as Northfield BESS. Delorean has raised \$100 million to date from Greenbacker  
14      Capital for both corporate and project finance. Delorean is in the process of structuring and  
15      raising its first tax equity and debt facilities to supplement the project equity already  
16      committed by Greenbacker Capital.

17  
18   **Q34. How will the Project be financed?**

19   A34. Delorean will finance Northfield BESS through its existing corporate partnership with  
20      Greenbacker Capital. The precise financing plans will be determined depending on business  
21      considerations once the Project is awarded a CPG. Delorean currently owns and maintains  
22      one other 10.5 MW energy storage asset through an entity similar to Northfield BESS, and  
23      the financing needed for Northfield BESS and the rest of Delorean's pipeline has already

1           been secured and will be further complemented through finalizing tax equity and debt  
2           transactions for Delorean's pipeline.

3  
4   **Q35. How will the Project facility be maintained?**

5   A35. The system will undergo routine maintenance roughly every six months. Regular  
6       maintenance will not require a crane or any heavy construction equipment. Delorean has  
7       extensive experience maintaining similar systems, and currently maintains the project that it  
8       owns and operates, with preventive maintenance being performed by the battery supplier,  
9       corrective maintenance by a local electrical contractor, and overall asset management being  
10      performed by Delorean staff.

11  
12   **Q36. Will Northfield BESS enter into any contracts with retail ratepayers in Vermont?**

13   A36. No. Neither Delorean nor Northfield BESS will enter into contracts with or sell energy  
14      directly to retail customers in Vermont, and therefore will not have service obligations to  
15      retail ratepayers and will not seek to recover any costs directly from retail customers. The  
16      Project will be a privately financed facility that will assume the risks of financial harm if the  
17      Project fails for any reason. The Commission's requirement for a fully-funded  
18      decommissioning fund for the Project will also ensure that Vermont taxpayers will be  
19      insulated from risk of financial harm in the event there are any issues with the Project.

20  
21   **Q37. Will the proposed ownership and operation of the Project business promote the**  
22      **general good of the State?**

1 A37. Yes. Projects such as this one have the potential to decrease the need for generation and  
2 transmission build-out, and help the grid operators balance supply and demand, especially as  
3 non-dispatchable renewables interconnect to the grid. VPPSA/NED issued an RFP for the  
4 Project because, as we understand it, VPPSA/NED has determined it will provide economic  
5 benefits to ratepayers.

6

7 **Q38. Does this conclude your testimony at this time?**

8 A38. Yes.

I declare that the testimony and exhibits that I have sponsored are true and accurate to the best of my knowledge and belief and were prepared by me or under my direct supervision. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Arlington, Virginia this 11 day of October, 2023.

**Respondent Signature**

By:   
\_\_\_\_\_

Michael Herbert